

SHEET INDEX	
NO.	
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILE SHEET

WATER AND SEWER EXTENSIONS

STAYTON BUSINESS CENTER

6th ELECTION DISTRICT

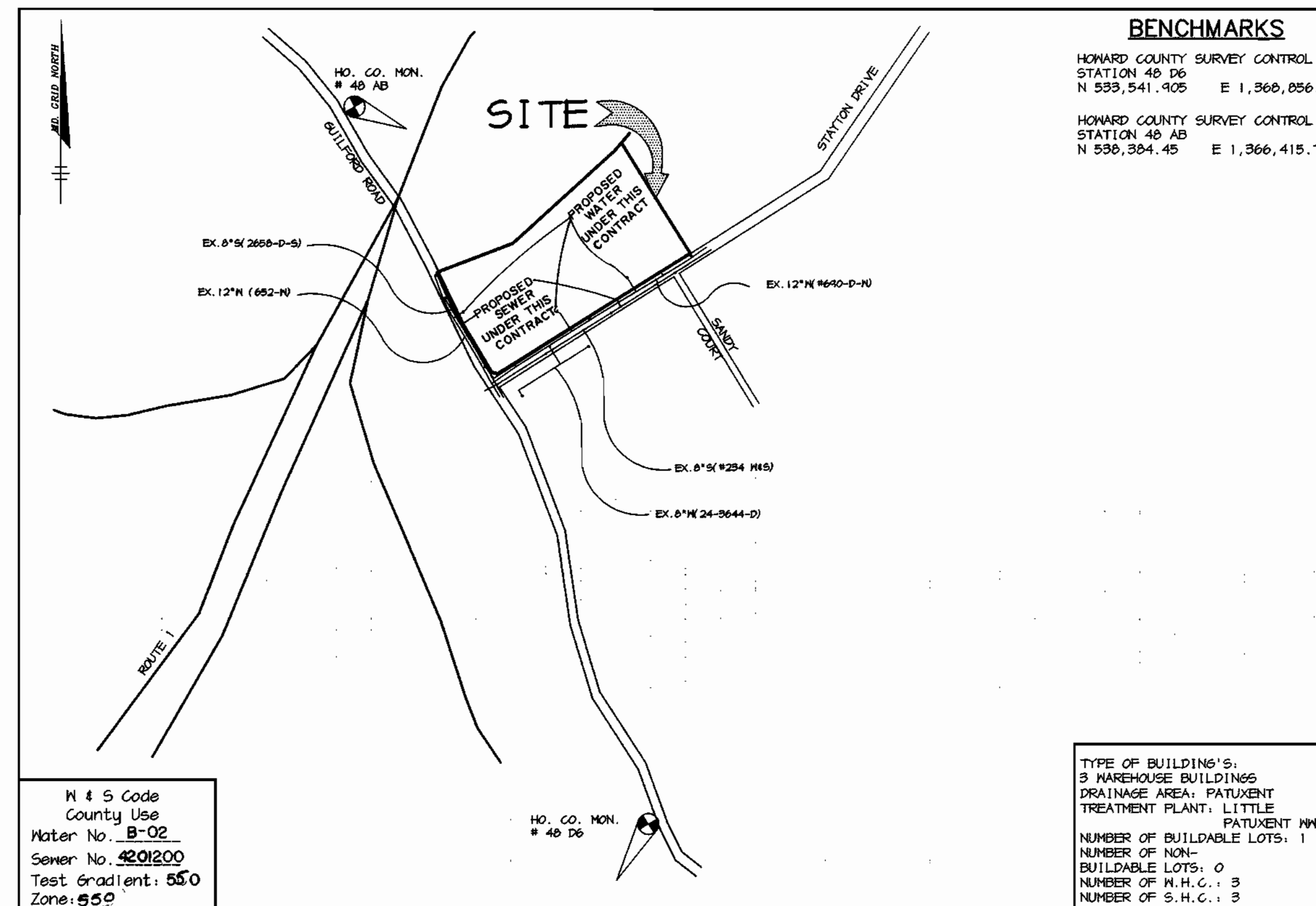
HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3763-D

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	787-9069
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	765-1390
Bureau of Utilities, Howard County Department of Public Works	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.
- 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 H.T. in plan and profile shall have watertight frame and cover, 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 H.1.1.1.
- 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) 319-7450 at least five (5) working days before any open cut of any County road or boring/lacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPM requirements per Section 10.114(a) of the Howard County Code.
- Howard County DPM 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.



BENCHMARKS	
HOWARD COUNTY SURVEY CONTROL STATION 48 D6 N 539,541.905 E 1,360,856.00	
HOWARD COUNTY SURVEY CONTROL STATION 48 AB N 539,304.45 E 1,366,415.79	

TYPE OF BUILDINGS: 3 WAREHOUSE BUILDINGS
DRAINAGE AREA: PATUXENT TREATMENT PLANT, LITTLE PATUXENT WWTP
NUMBER OF BUILDABLE LOTS: 1
NUMBER OF NON-BUILDABLE LOTS: 0
NUMBER OF M.H.C.: 3
NUMBER OF S.H.C.: 3

VICINITY MAP
SCALE: 1"=600'

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	187 LF			
6" WATER	134 LF			
8" VALVES	2 EA.			
6" VALVES	2 EA.			
12" X 8" TSV	2 EA.			
12" X 6" TSV	1 EA.			
8" X 8" T	2 EA.			
8" X 6" T	1 EA.			
8" X 1/8" HB	1 EA.			
FIRE HYDRANTS	4 EA.			
8" X 6" R	1 EA.			
TYPE "A" DROP SEWER MANHOLES	2 EA.			
8" SEWER	50 LF			

NAME OF UTILITY CONTRACTOR :

<input type="checkbox"/> Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-99-102	<input type="checkbox"/> CHECKBOX AS-BUILT DATE SURVEY AND DRAFTING DIVISION
--	--

Review for Howard Soil Conservation District and meets technical requirements.

Gleah Simmons 7/7/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John Robertson 7/7/99
HOWARD SOIL CONSERVATION DISTRICT DATE

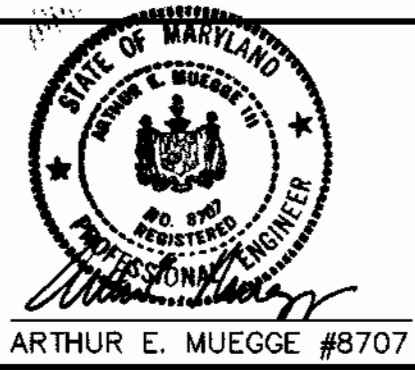
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert Berman 7-1-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

John Damulani 7/6/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
Tel 410.997.8900 fax 410.997.9282
96080 WSL/DWG



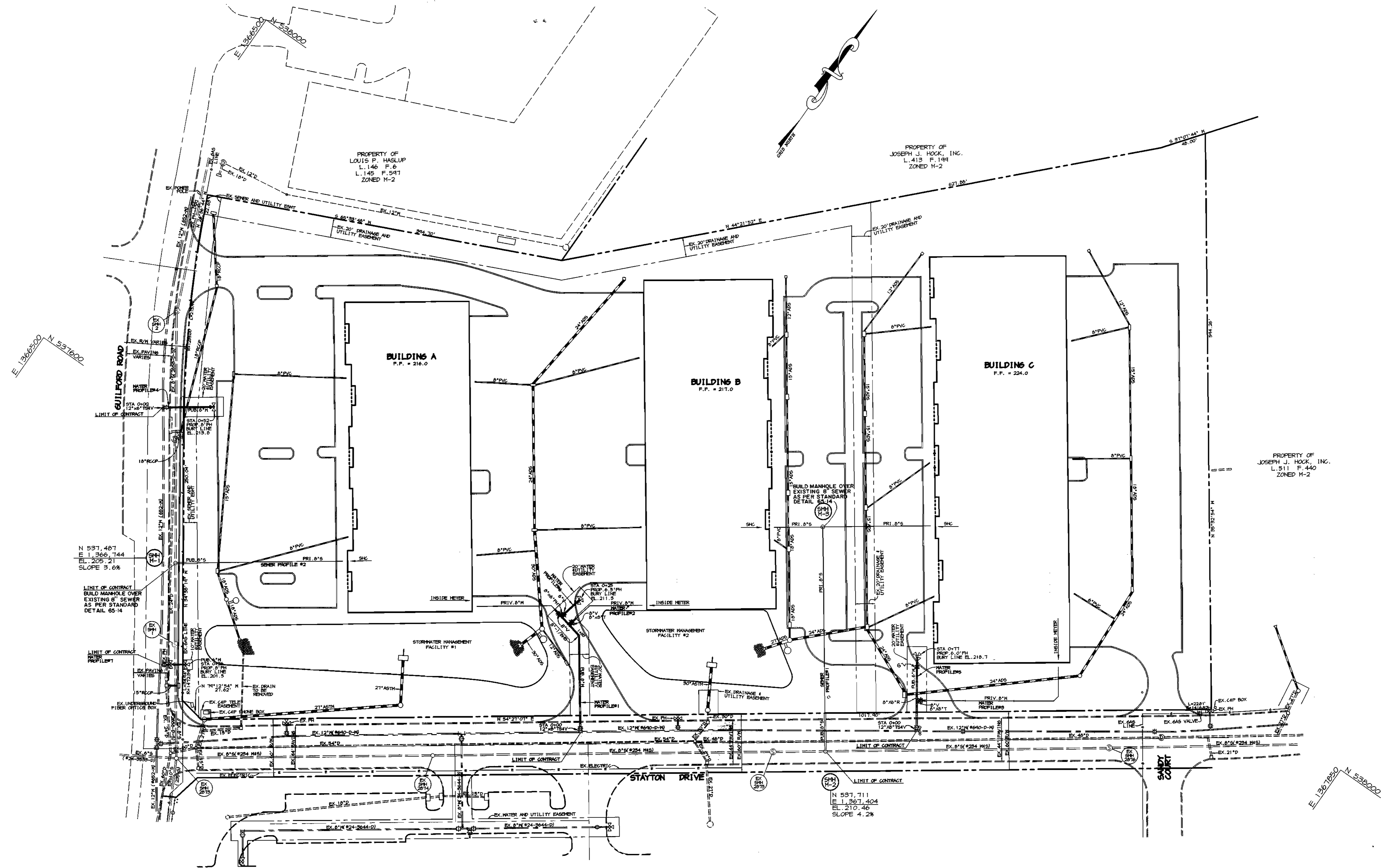
DES: C.J.R.	
DRN: K.E.V.	
CHK: C.J.R.	
DATE: 6/10/99	
BY NO.	
REVISION	
DATE	

TITLE SHEET

600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D

SCALE AS SHOWN
SHEET 1 OF 3

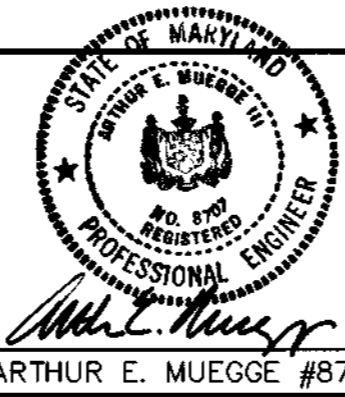


PLAN
SCALE: 1" = 50'

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
06869 WSS.DWG



DES: C.J.R.
DRN: K.E.V.
CHK: C.J.R.
DATE: 6/10/99

BY	NO.	REVISION	DATE

**PLAN OF
WATER AND SEWER MAINS**

600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D

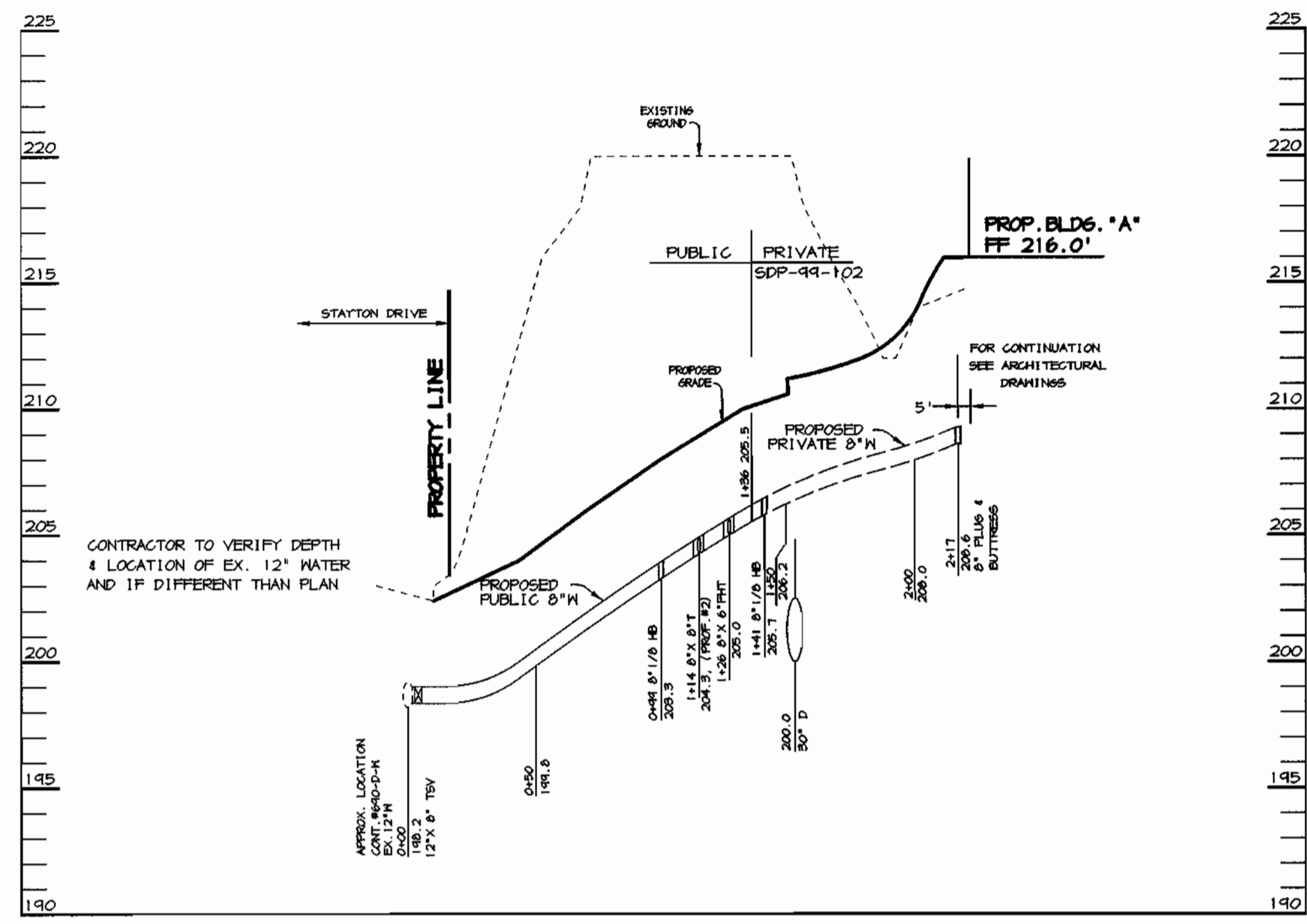
SCALE
AS
SHOWN

SHEET
2 OF 3

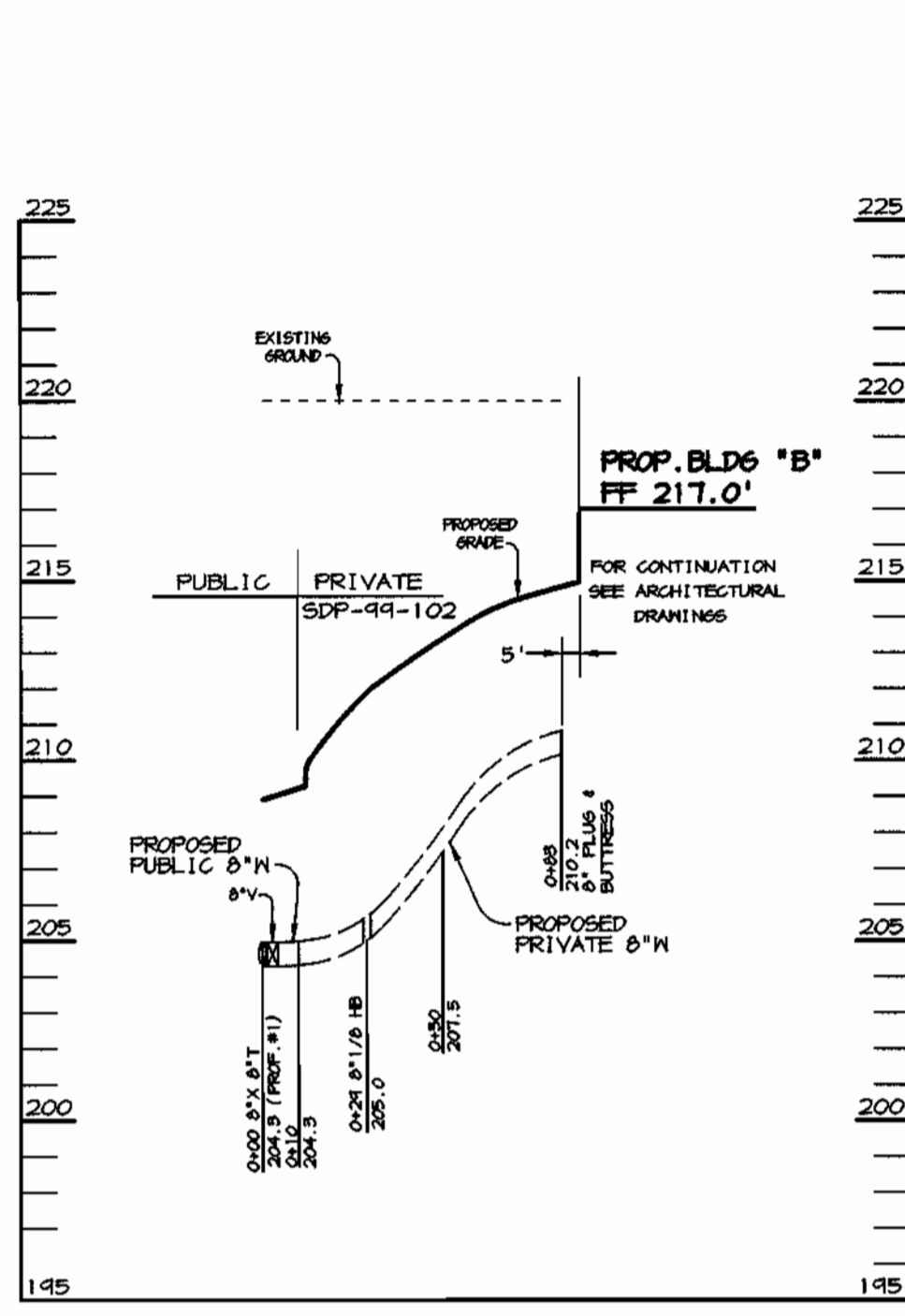
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Robert Rainier 7-1-99
CHIEF, BUREAU OF UTILITIES DATE

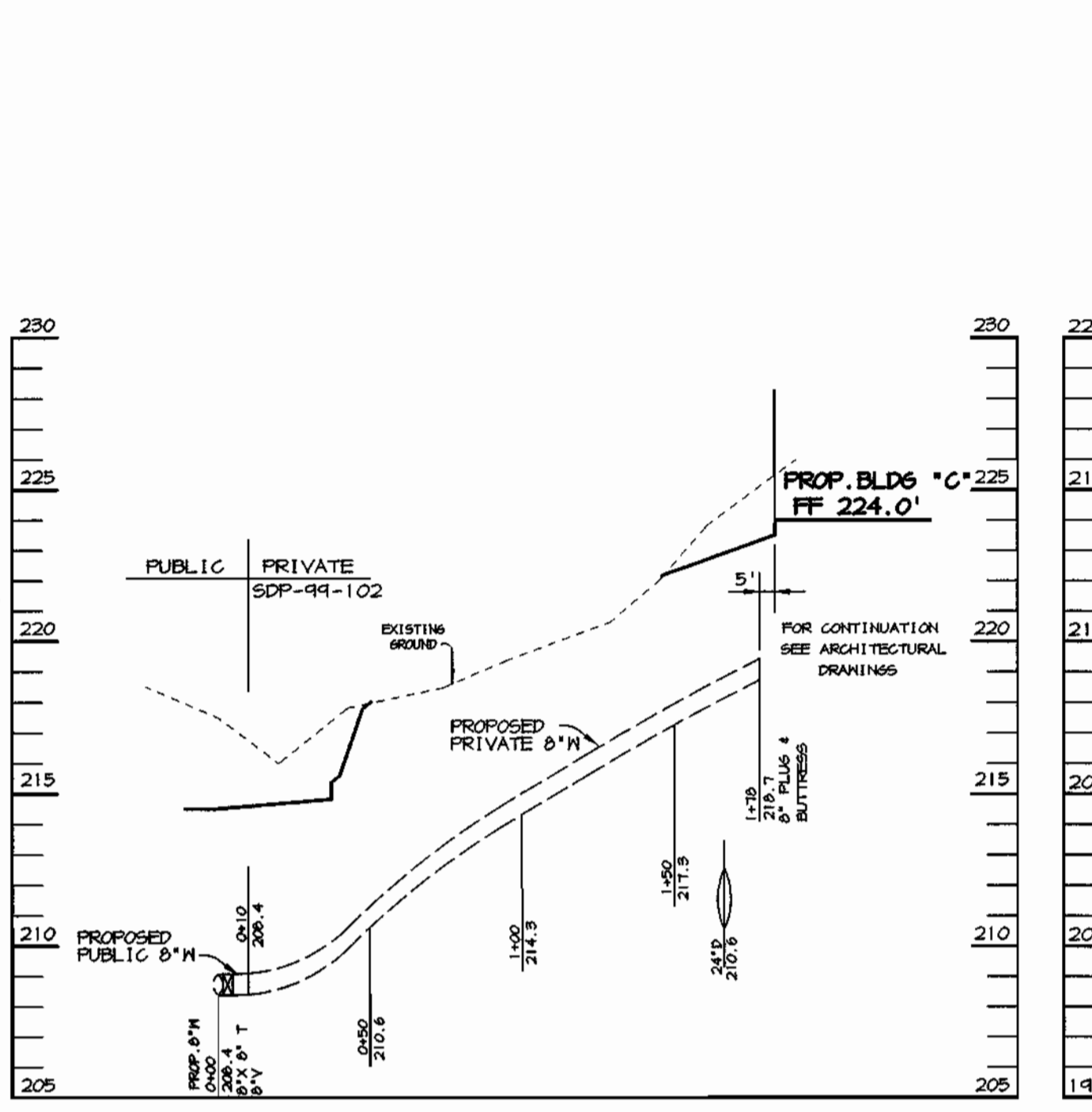
Howard Rainier 7/6/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



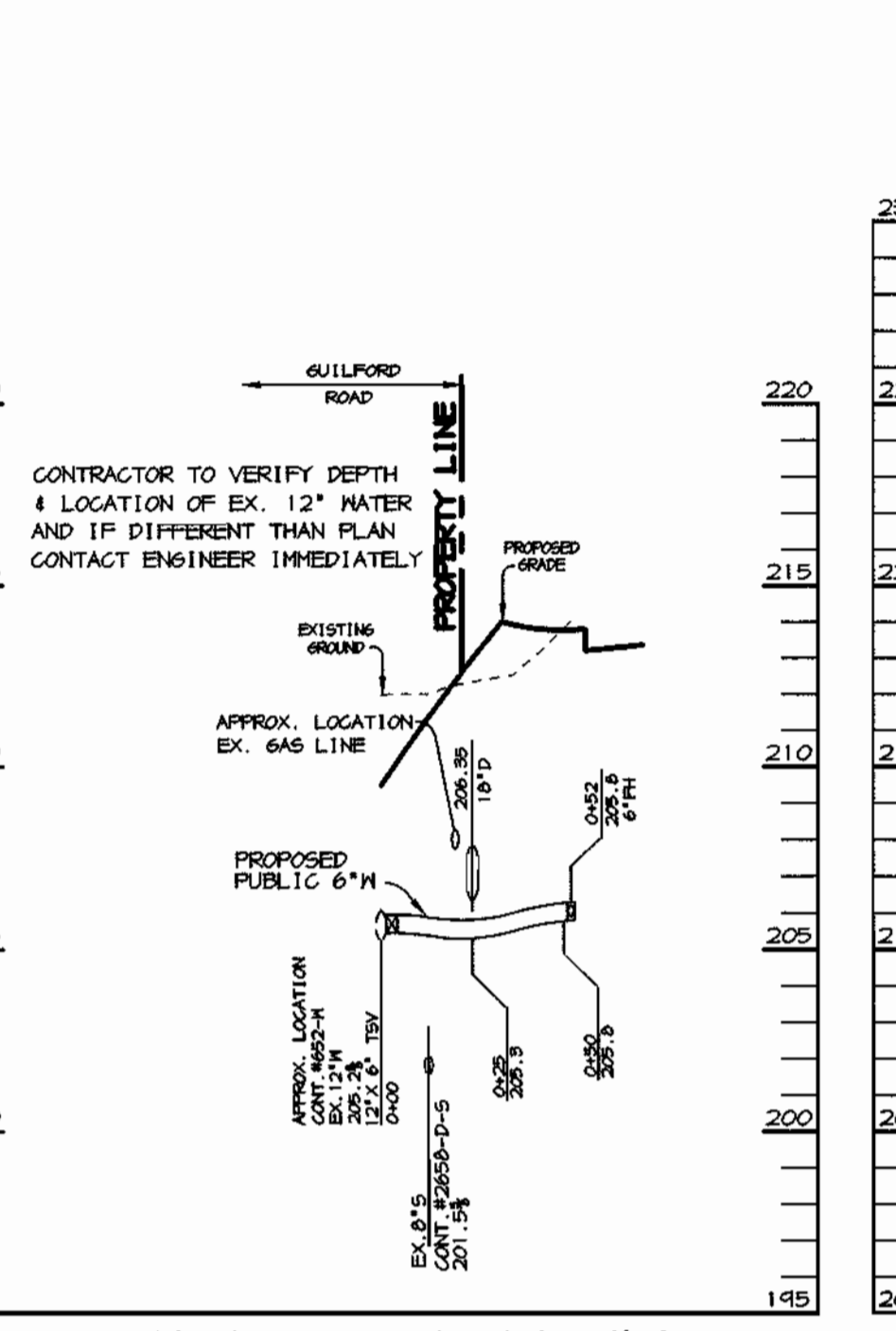
WATER PROFILE #1
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



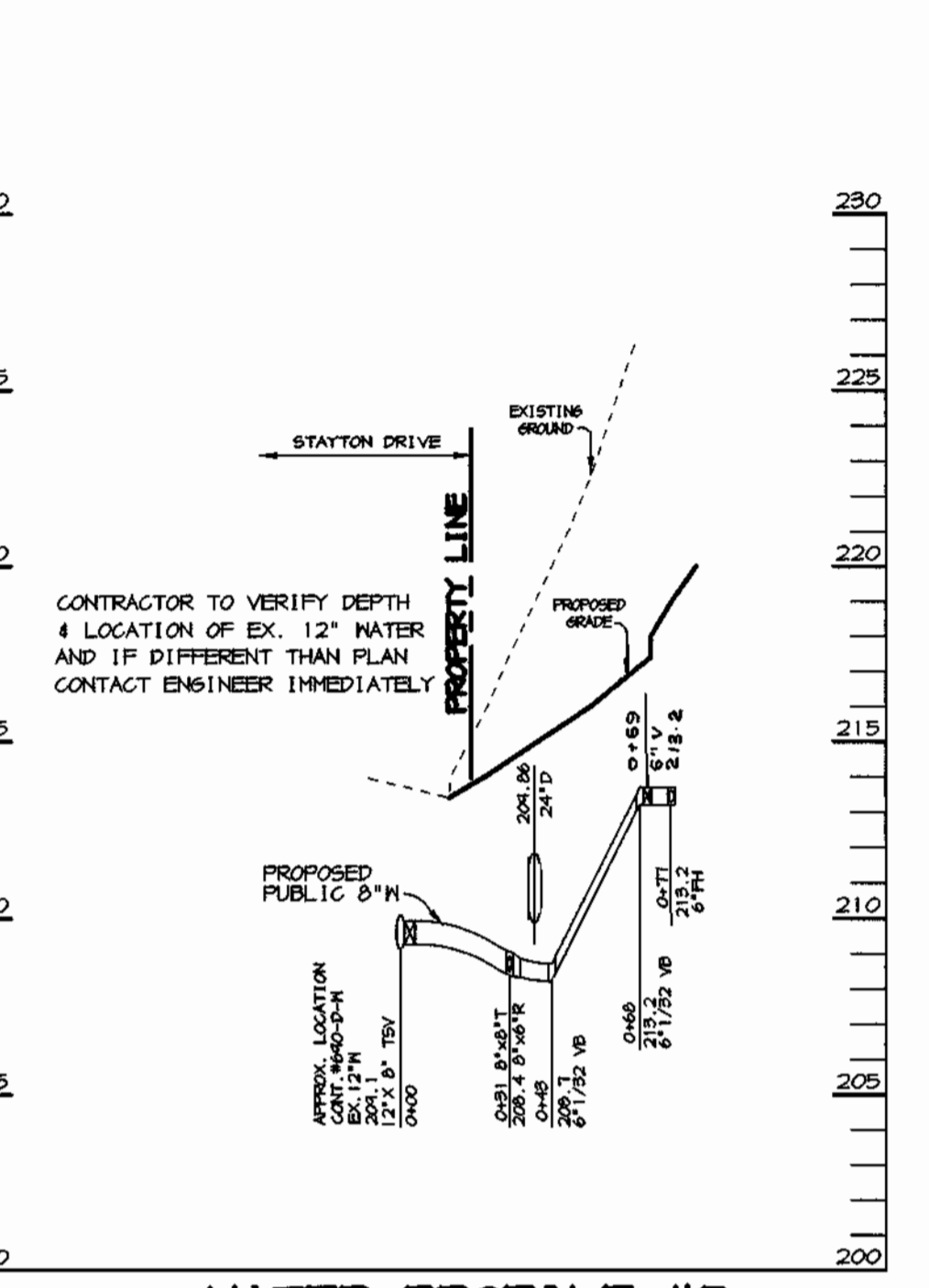
WATER PROFILE #2
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



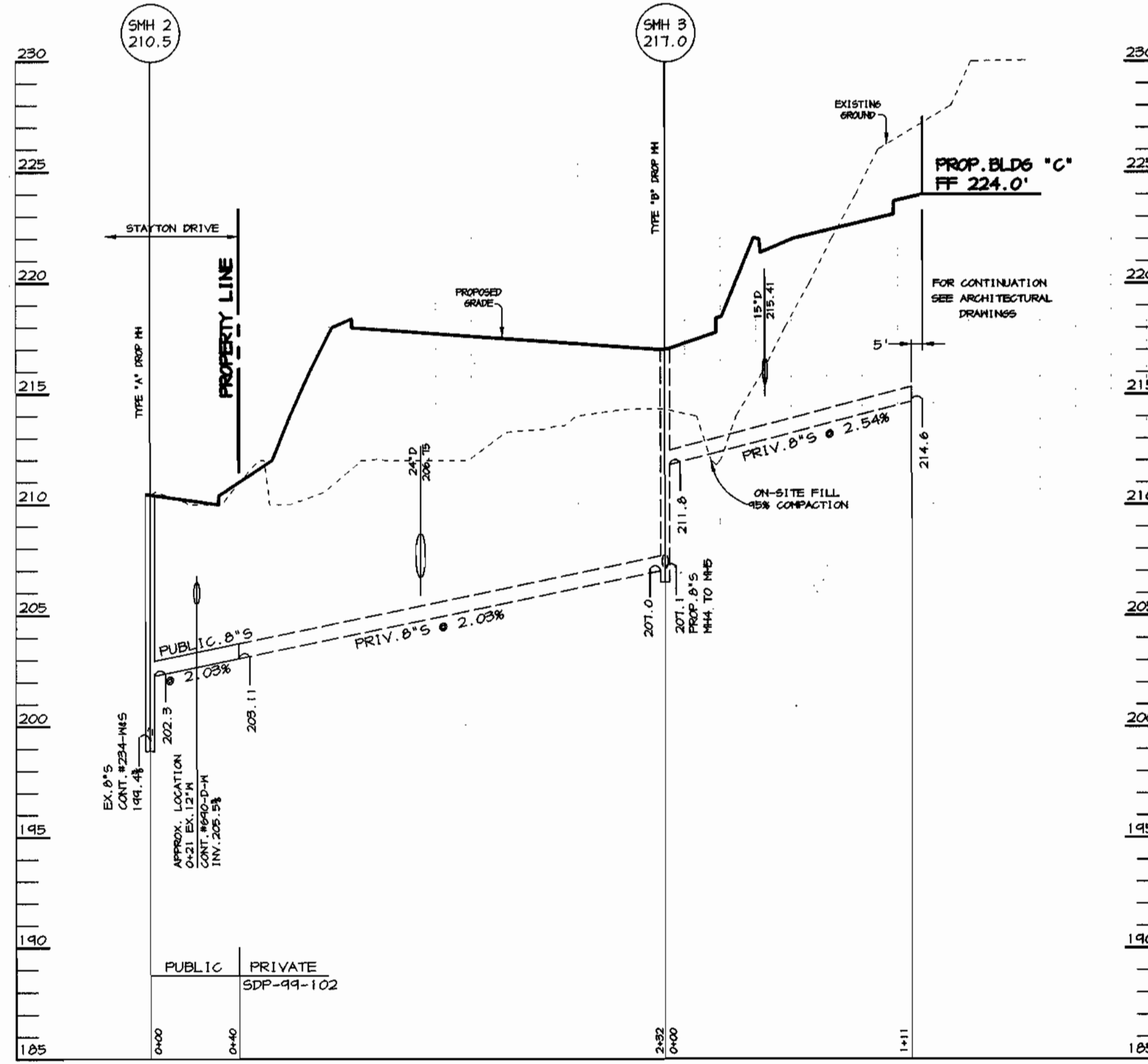
WATER PROFILE #3
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



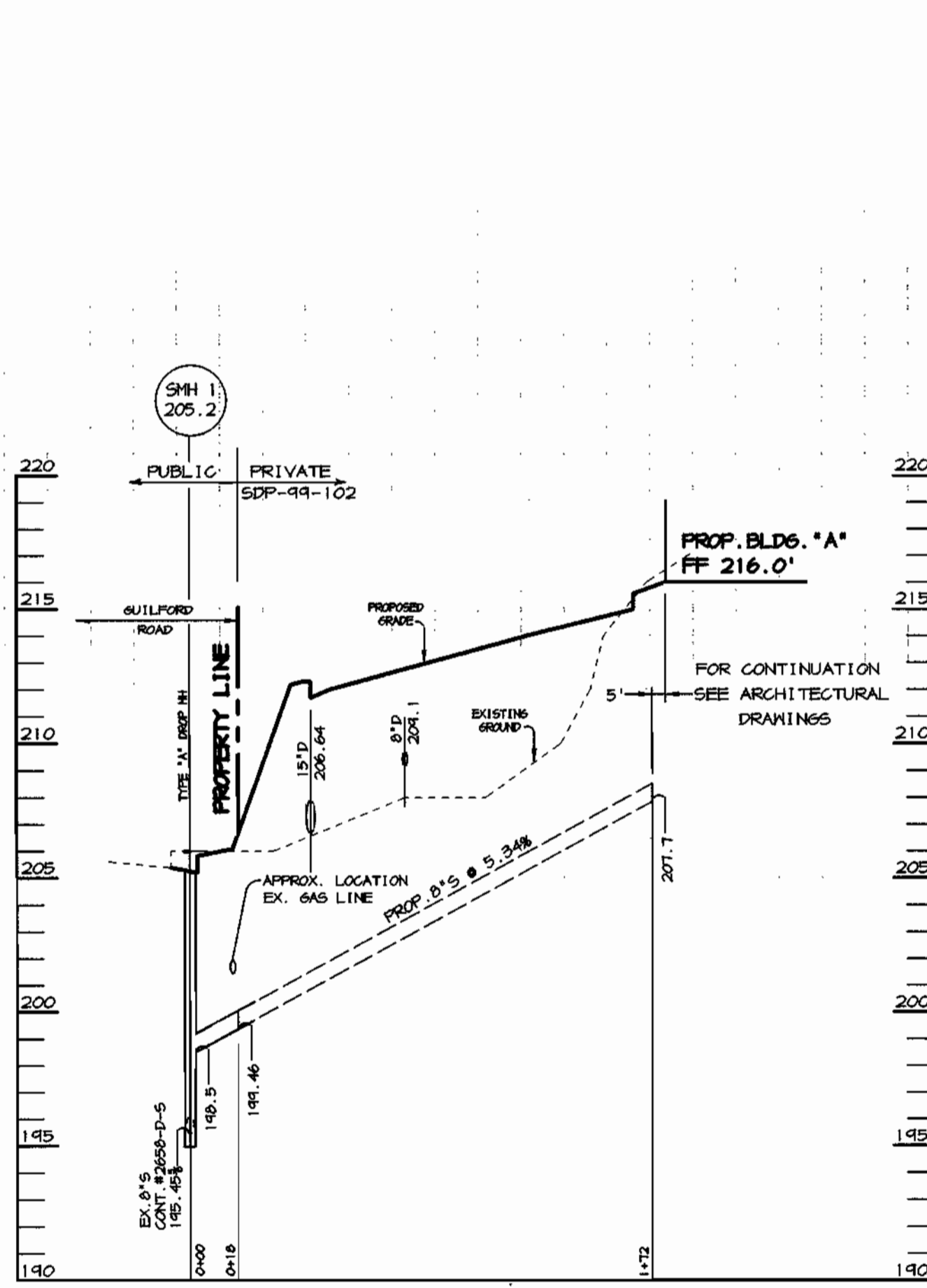
WATER PROFILE #4
 SCALE:
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 VERT. - 1"=5'



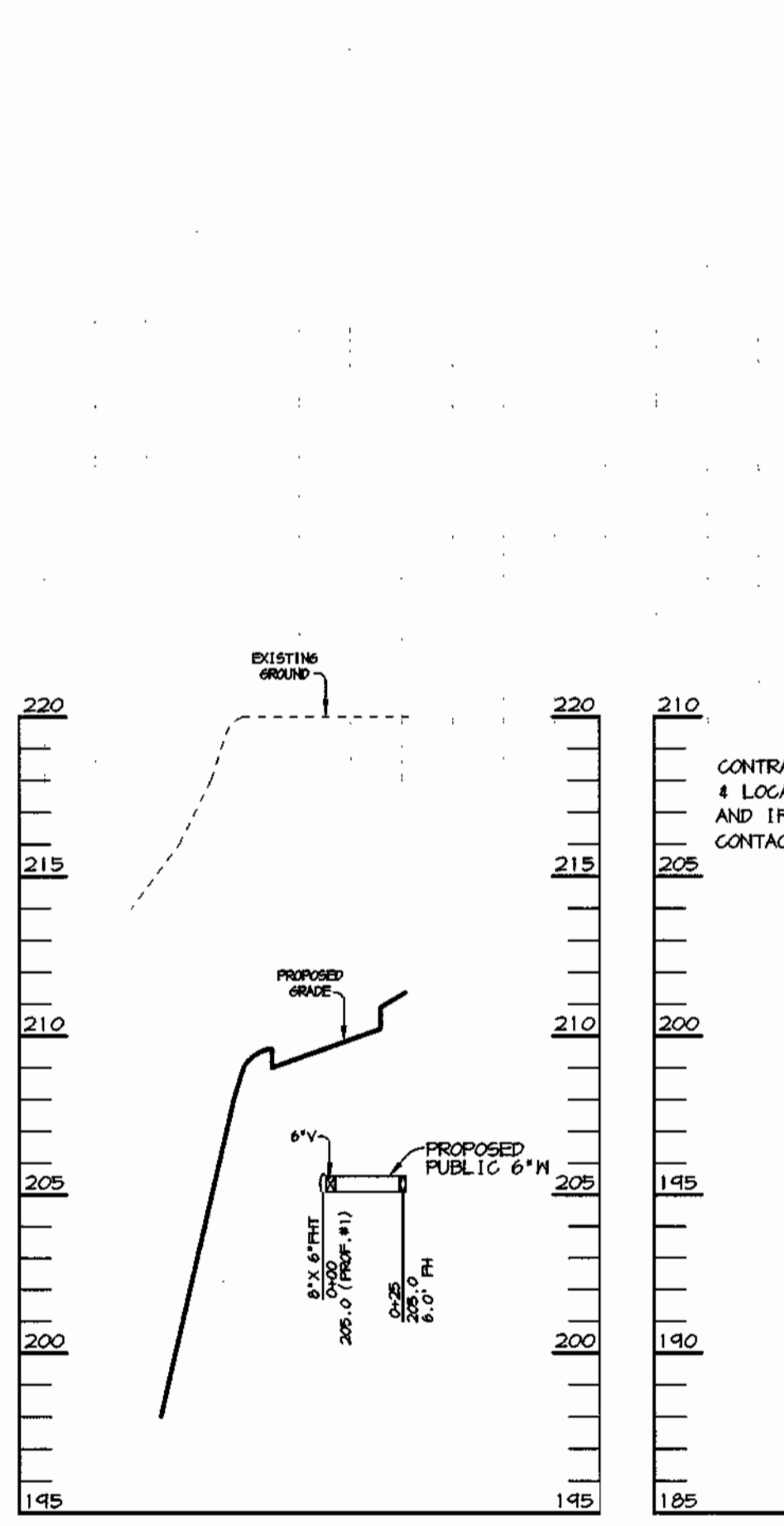
WATER PROFILE #5
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



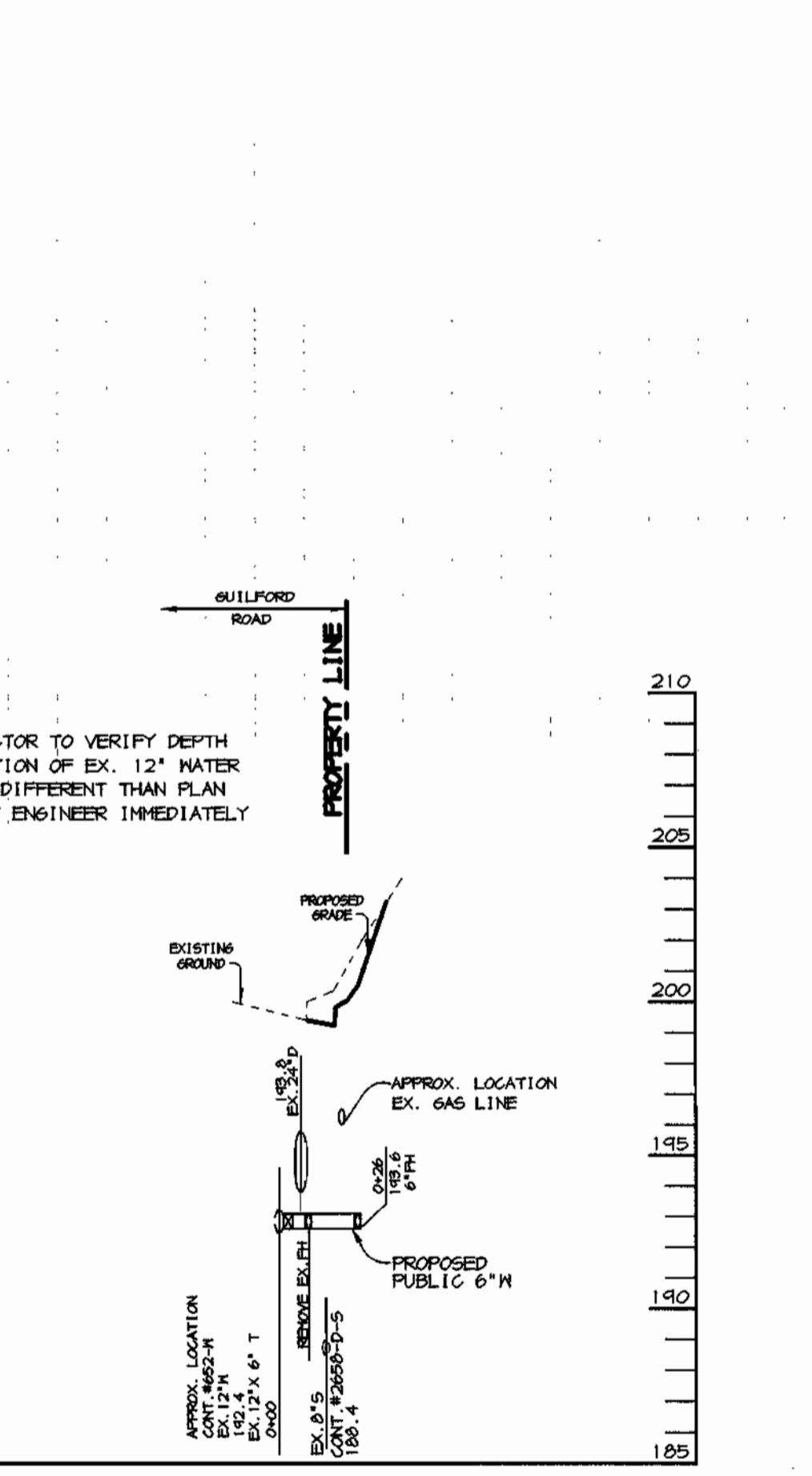
SEWER PROFILE #1
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



SEWER PROFILE #2
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



WATER PROFILE #6
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'



WATER PROFILE #7
 SCALE:
 HOR. - 1"=50'
 VERT. - 1"=5'

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
 98389 733.DWG



DES:	C.J.R.			
DRN:	K.E.V.			
CHK:	C.J.R.			
DATE:	6/10/99			
BY:	NO.	REVISION	DATE	

**PROFILES OF
 WATER AND SEWER MAINS**

600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
 BALTIMORE WASHINGTON INDUSTRIAL PARK
 PARCEL F-1
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT 24-3763-D

SCALE
 AS
 SHOWN
 SHEET
 3 OF 3

SHEET INDEX	
NO.	
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILE SHEET

WATER AND SEWER EXTENSIONS

STAYTON BUSINESS CENTER

6th ELECTION DISTRICT

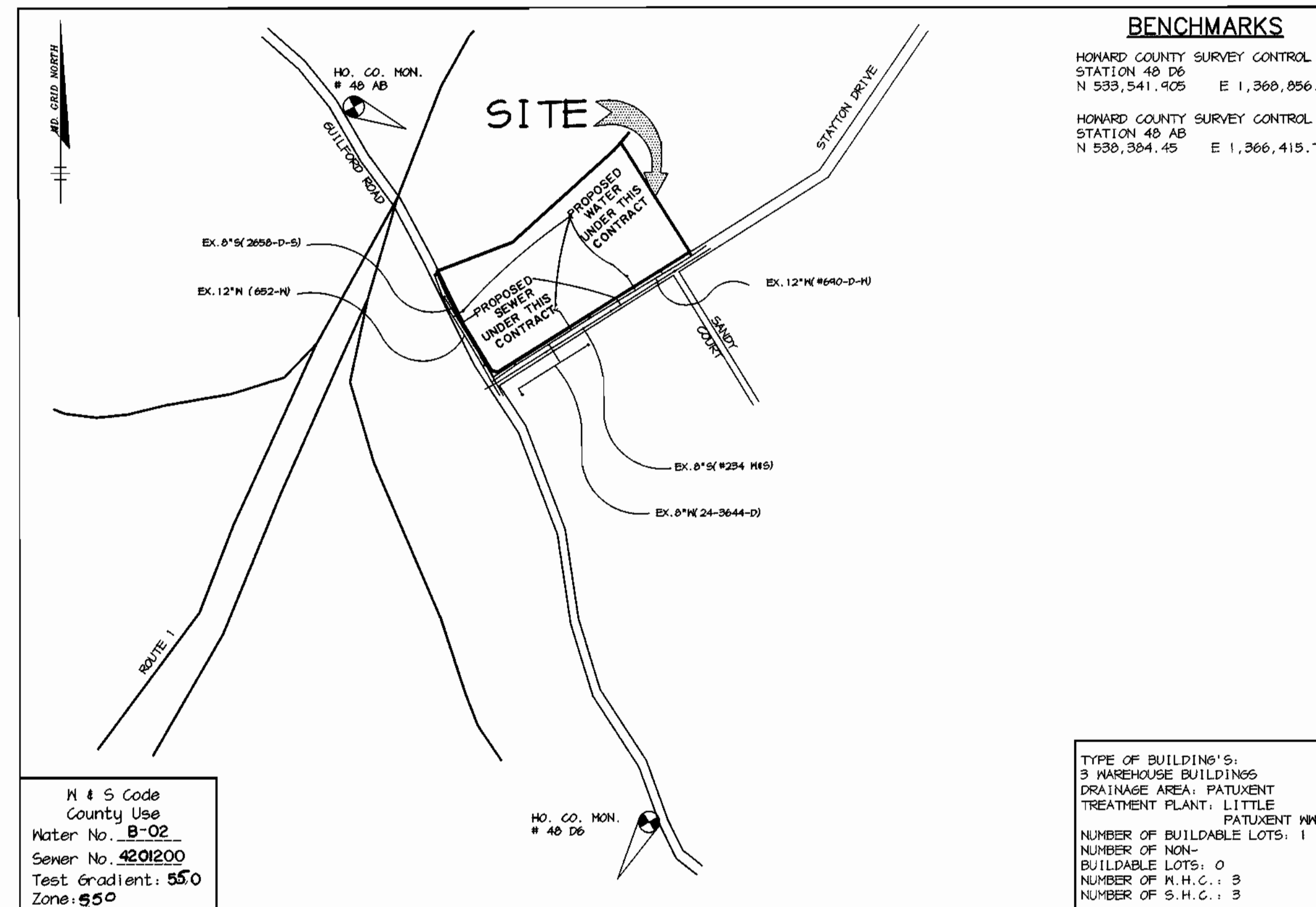
HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3763-D

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 \bigcirc 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 \square 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.
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Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	301-9068
Miss Utility	1-800-251-7111
Colonial Pipeline Co.	345-1340
Bureau of Utilities, Howard County Department of Public Works	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.
- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Top 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.
- Force mains shall be 4'-0" inside diameter unless otherwise noted.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated N.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 N.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) 313-1450 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 DPM requirements per Section 18.114(a) of the Howard County Code.
- Howard County DPM 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.



VICINITY MAP
SCALE: 1"=600'

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	187 LF			
6" WATER	134 LF			
8" VALVES	2 EA.			
6" VALVES	2 EA.			
12" X 8" TSV	2 EA.			
12" X 6" TSV	1 EA.			
8" X 8" T	2 EA.			
8" X 6" T	1 EA.			
8" 1/2" HB	1 EA.			
FIRE HYDRANTS	4 EA.			
8" X 6" R	1 EA.			
SEWER MANHOLES	1 EA.			
8" SEWER	85 LF			

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-99-102	CHECKBOX AS-BUILT DATE
	SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Glenn Simmons 7/7/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
John Robertson 7/7/99
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert Berman 7-1-99
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John Danilunas 7/6/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
88389 WSI.DWG



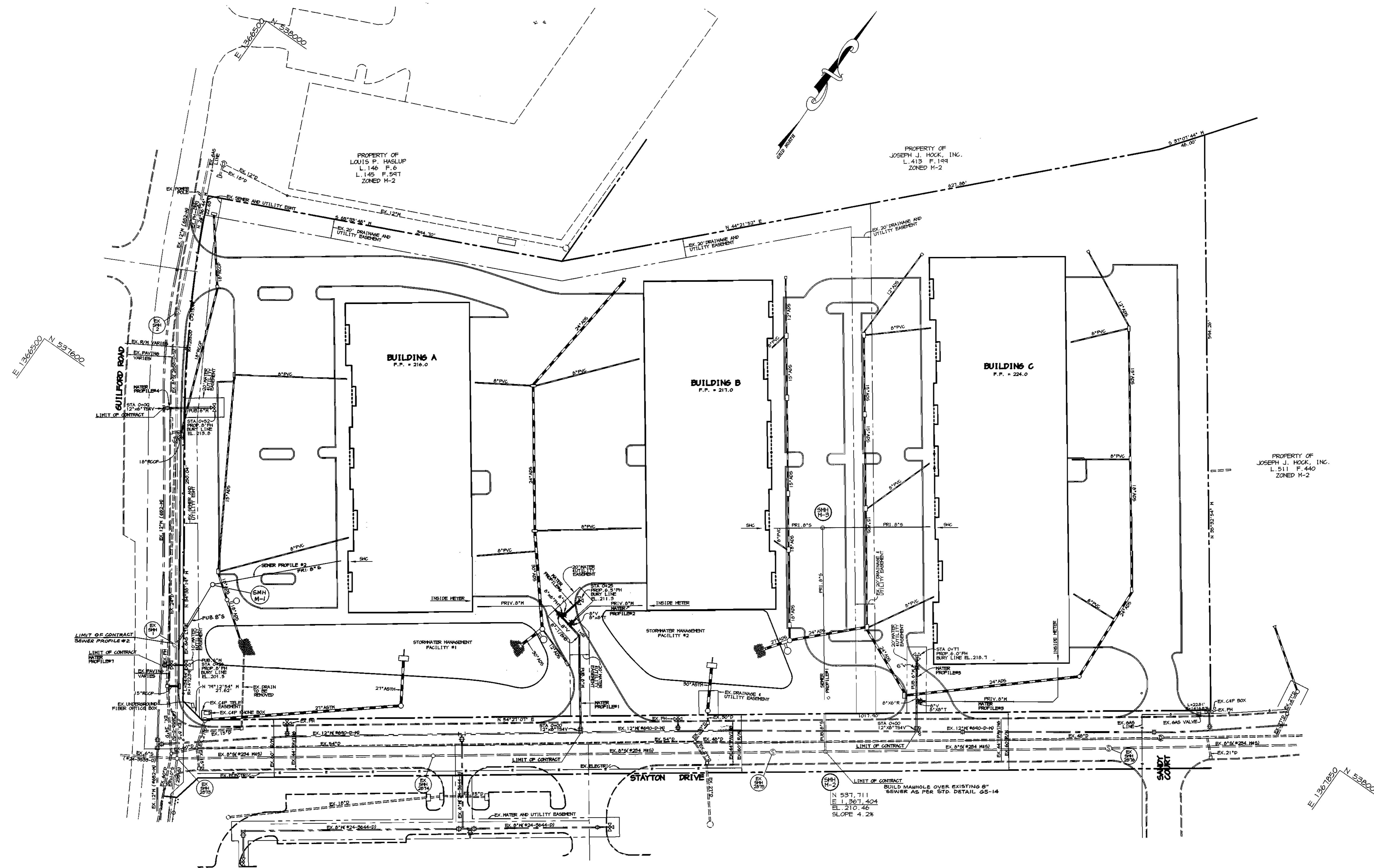
DES: C.J.R.				
DRN: K.E.V.				
CHK: C.J.R.				
DATE: 6/10/99				
BY: NO.				
		ADJUSTED QUANTITY BOX	4-700	
		REVISION	DATE	

TITLE SHEET

600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D

SCALE AS SHOWN
SHEET 1 OF 3



PLAN
SCALE: 1" = 50'

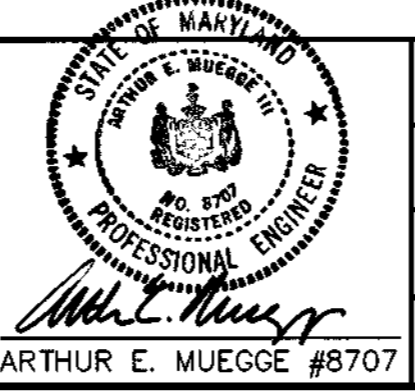
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. Benninger
CHIEF, BUREAU OF UTILITIES
7-1-99
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

H. M. [Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
7/1/99
DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
98389 MSZ.DWG



DES: C.J.R.				
DRN: K.E.V.				
CHK: C.J.R.				
DATE: 6/10/99				
BY:	NO.	REVISION	DATE	
		RELOCATE SEWER TO BUILDING A	4-7-00	

**PLAN OF
WATER AND SEWER MAINS**

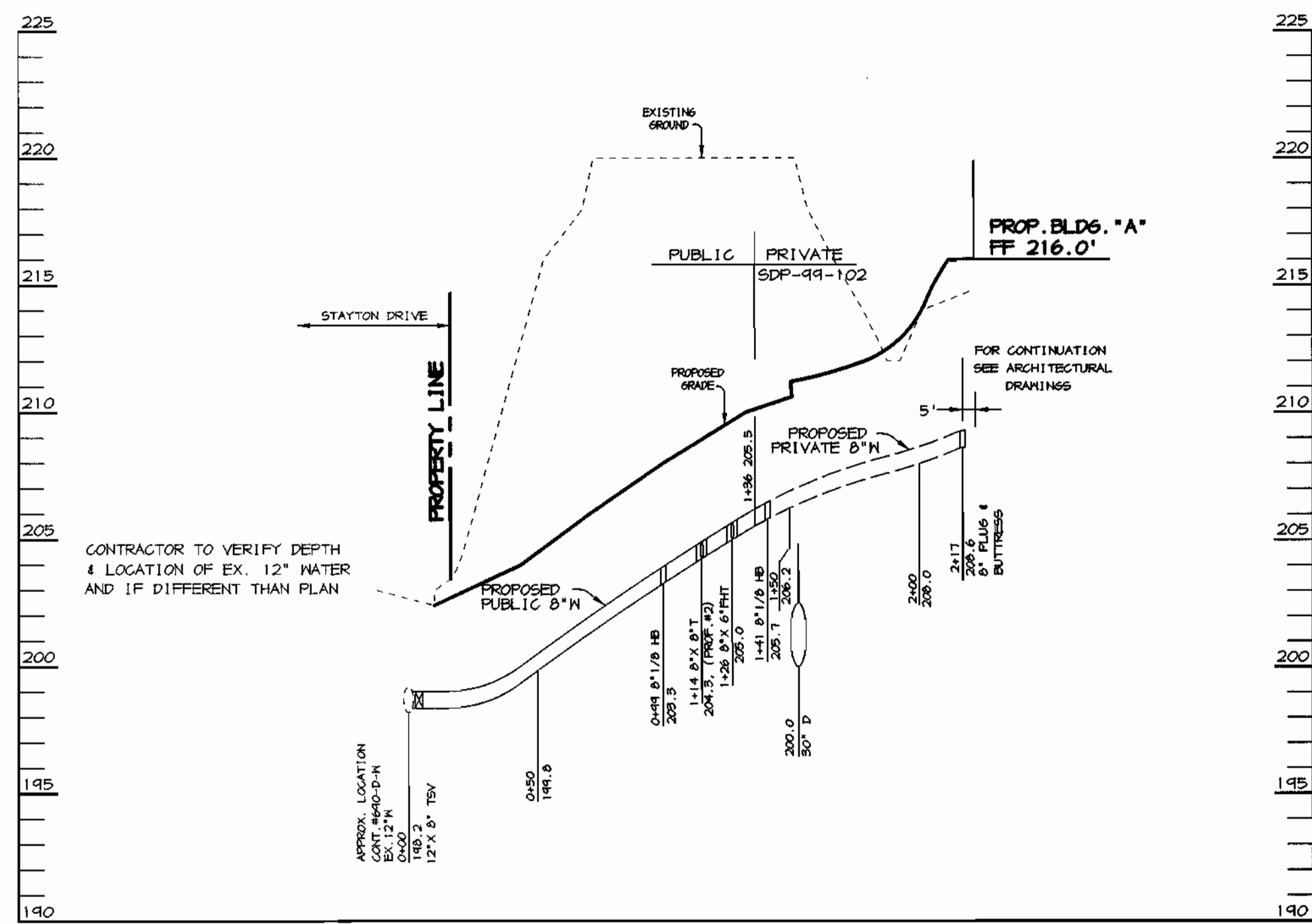
600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D

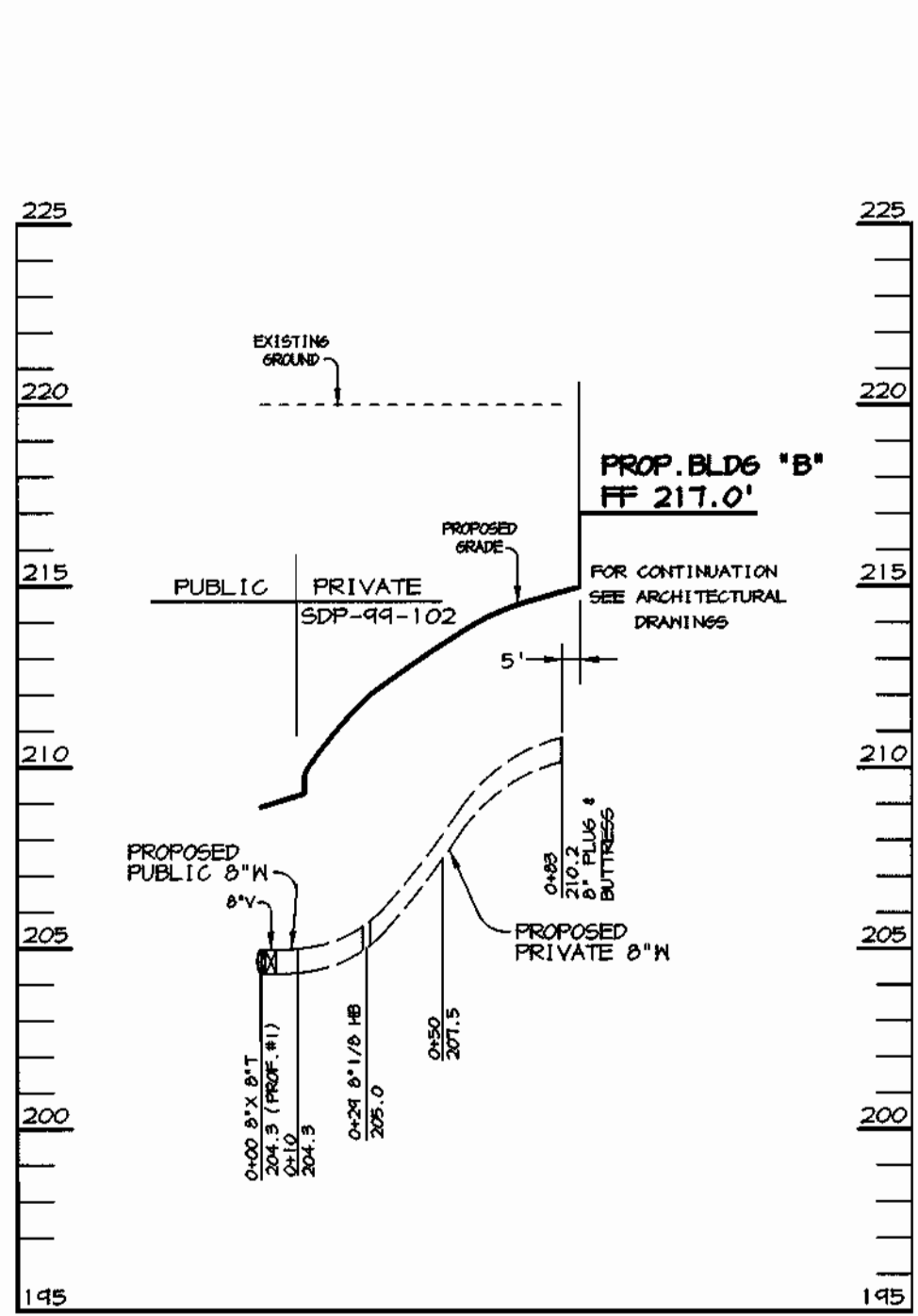
SCALE
AS
SHOWN

SHEET
2 OF 3

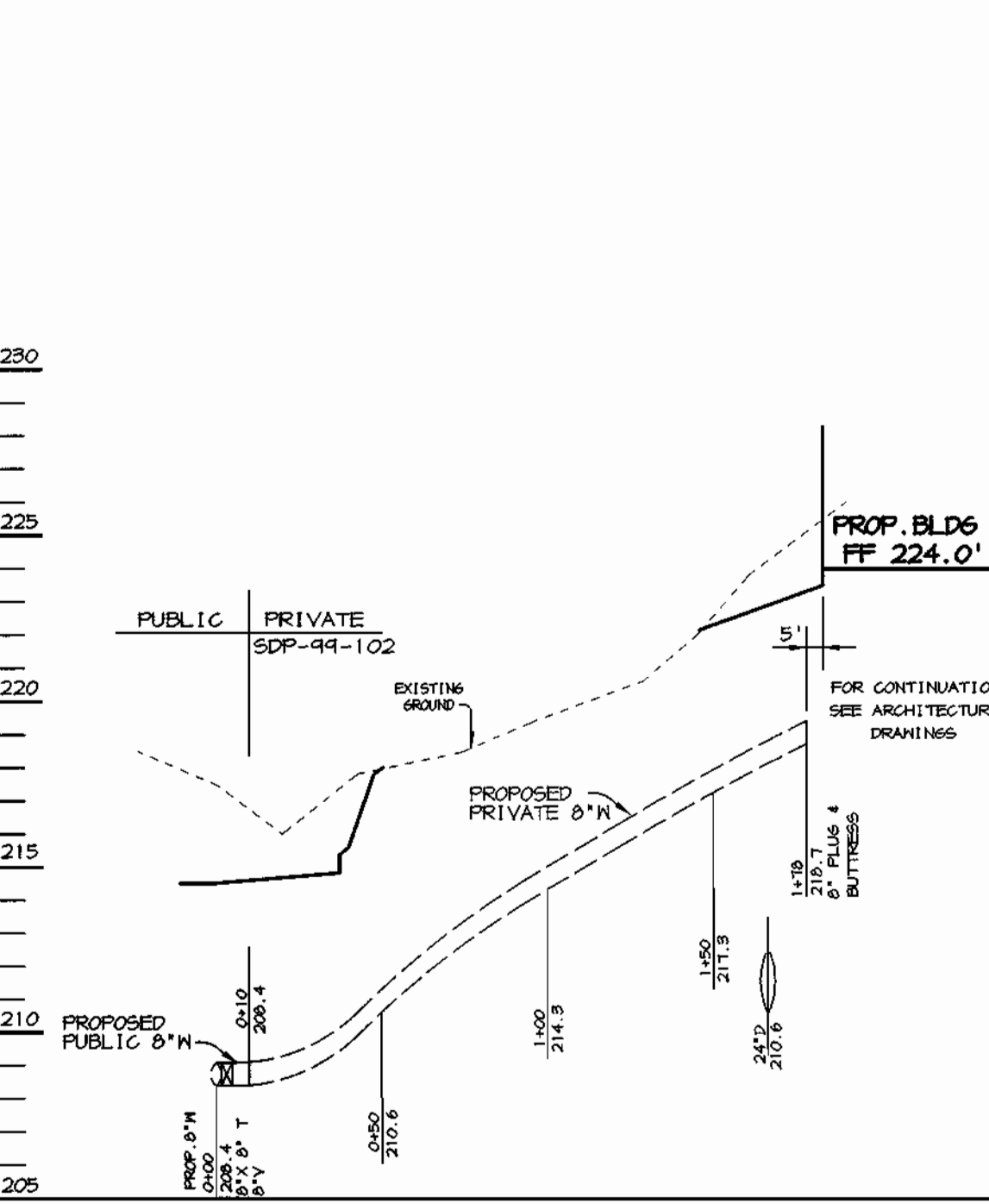
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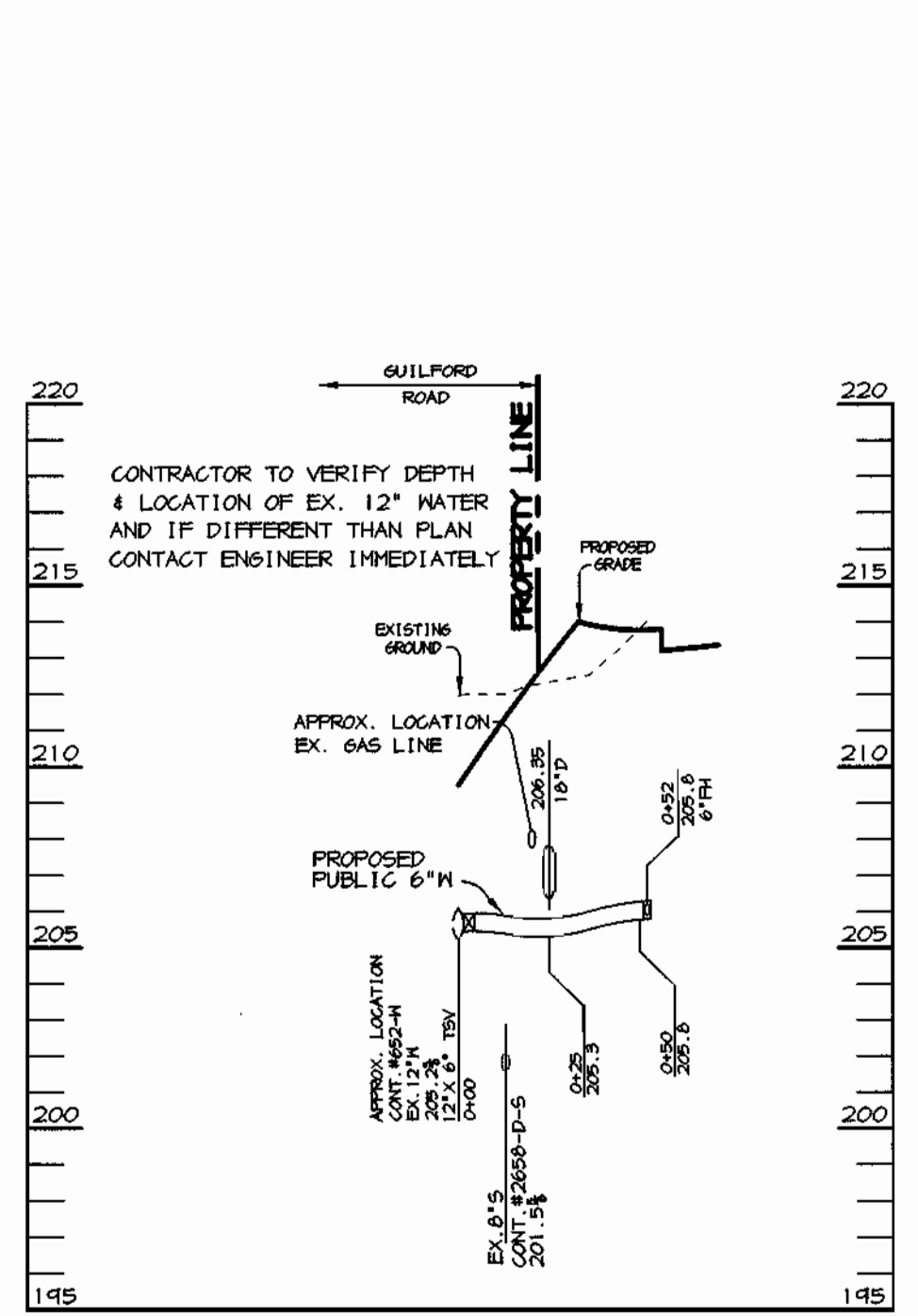
WATER PROFILE #1
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 HOR. - 1" = 50'
 VERT. - 1" = 5'



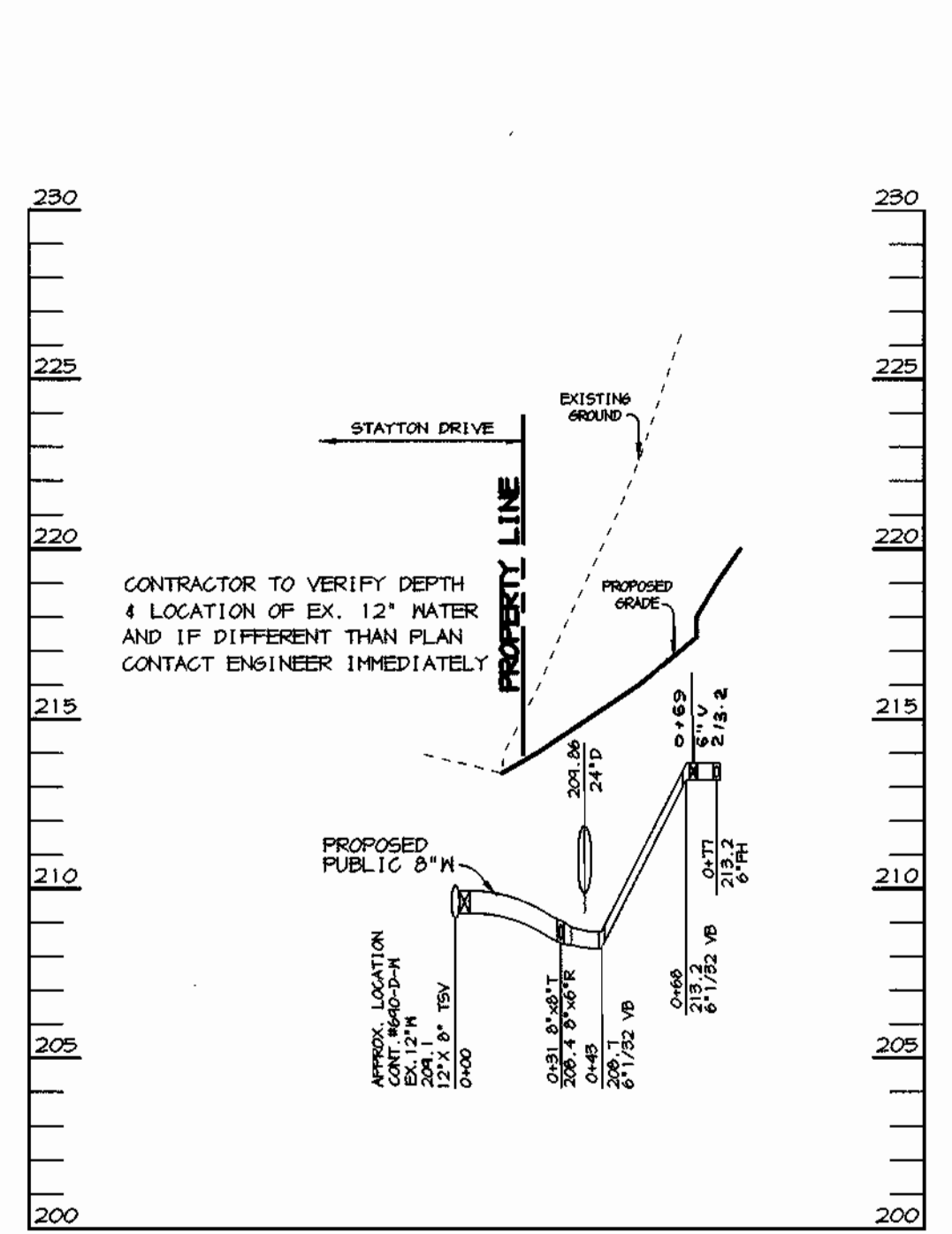
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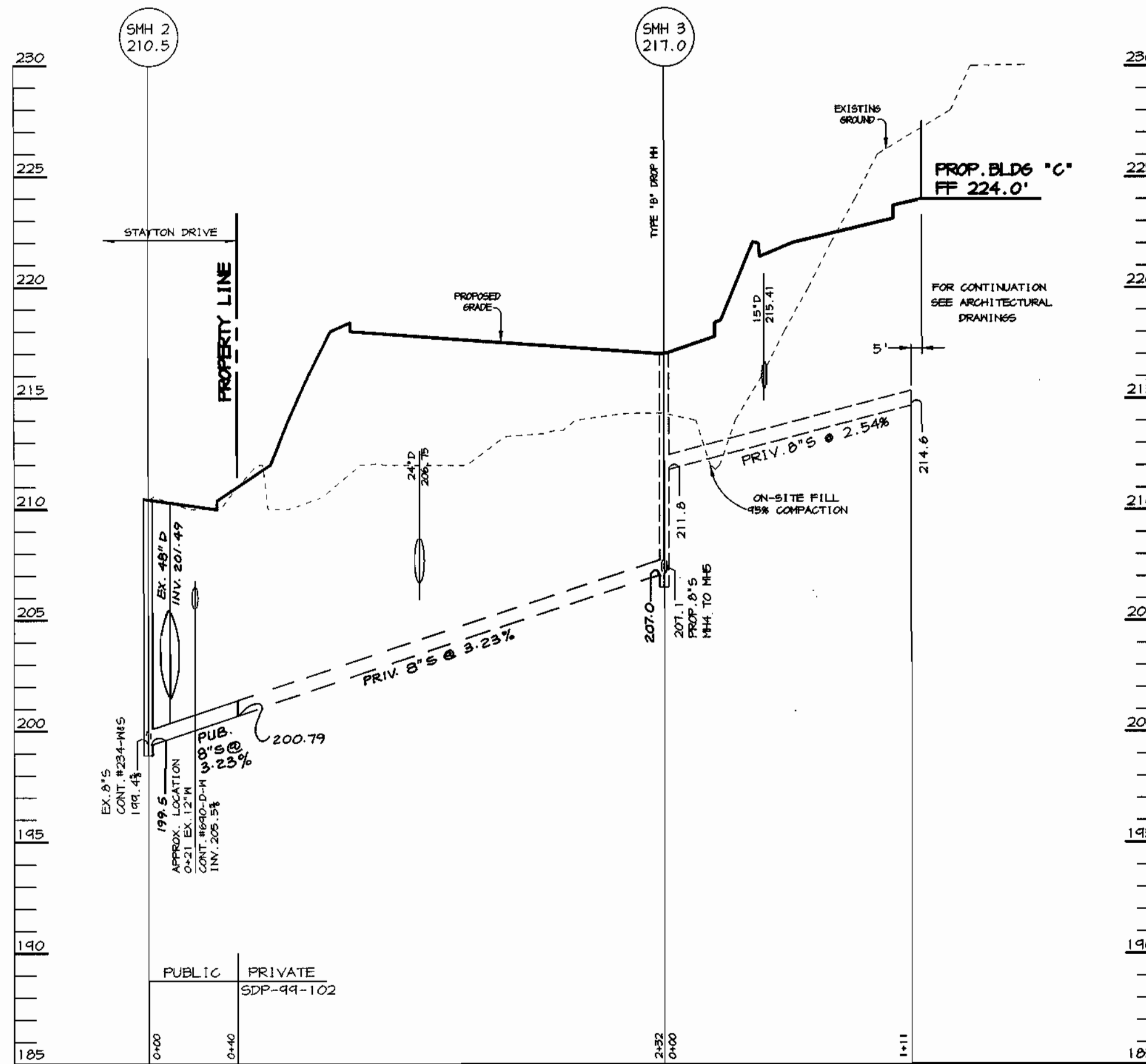
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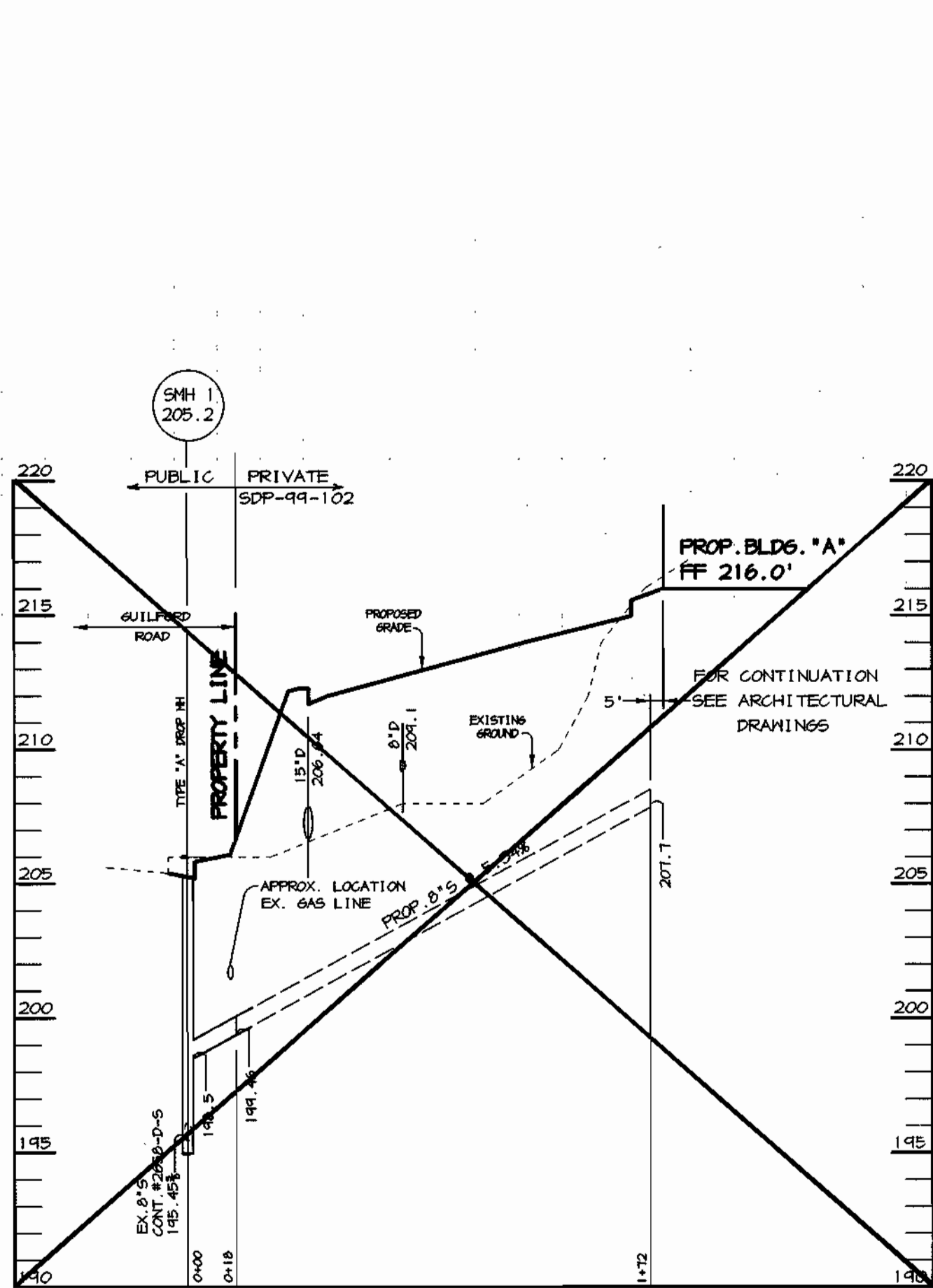
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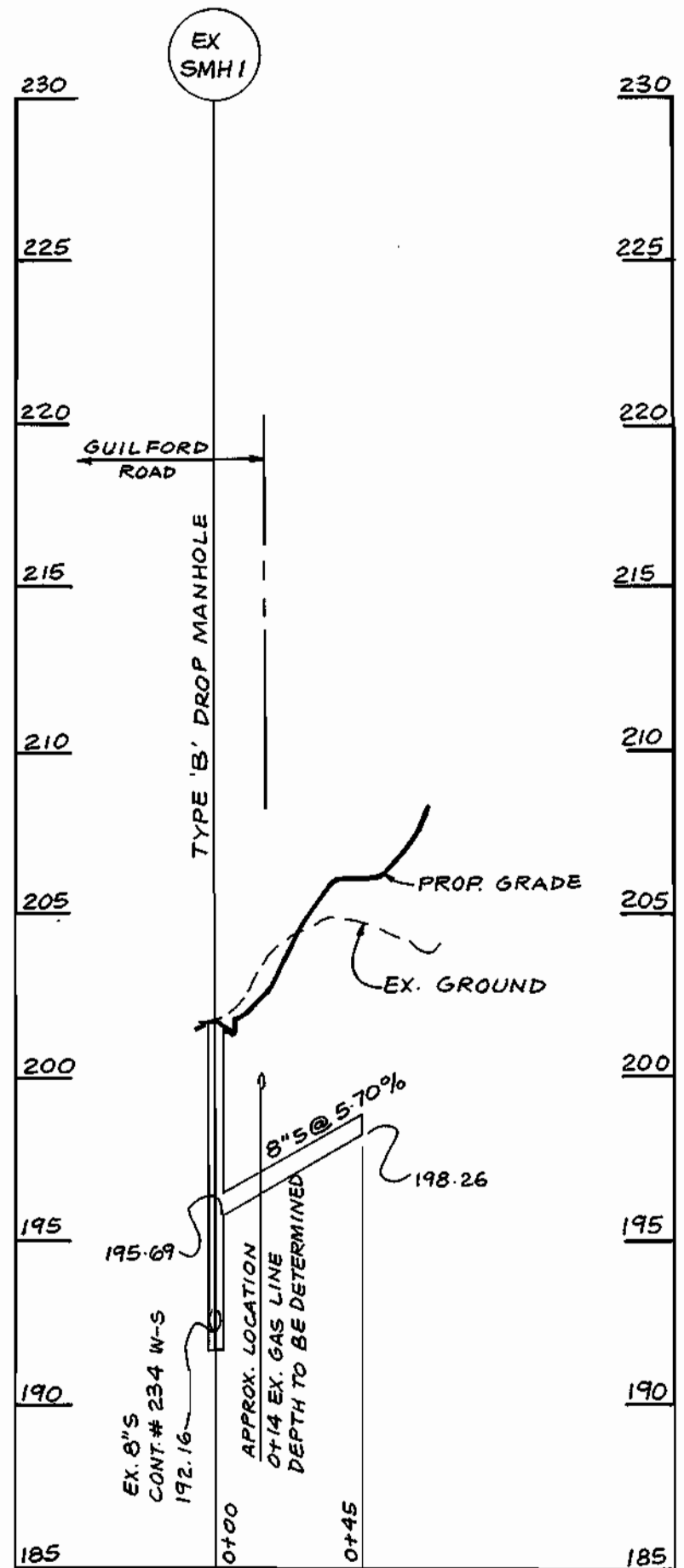
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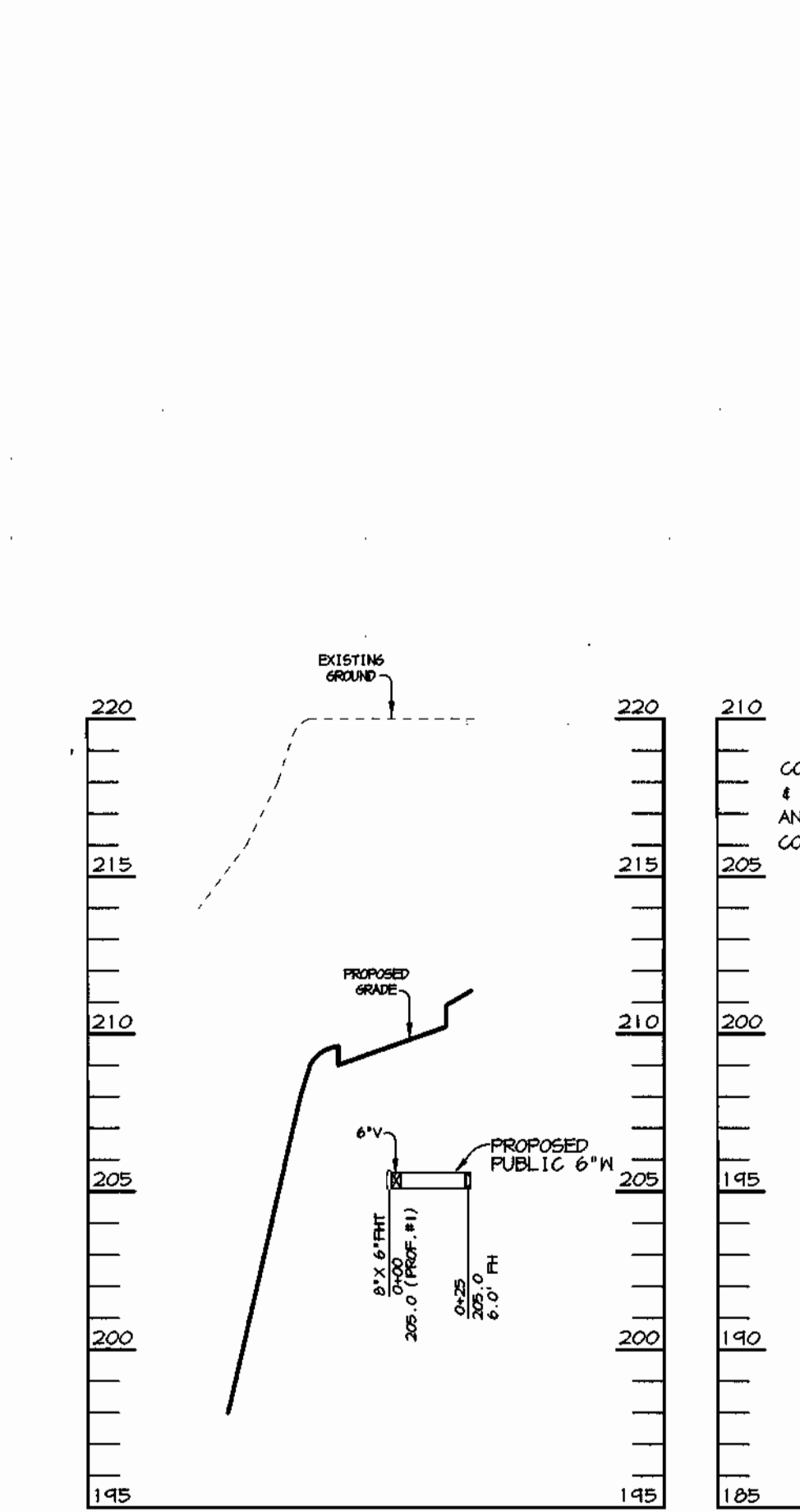
SEWER PROFILE #1
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 HOR. - 1" = 50'
 VERT. - 1" = 5'



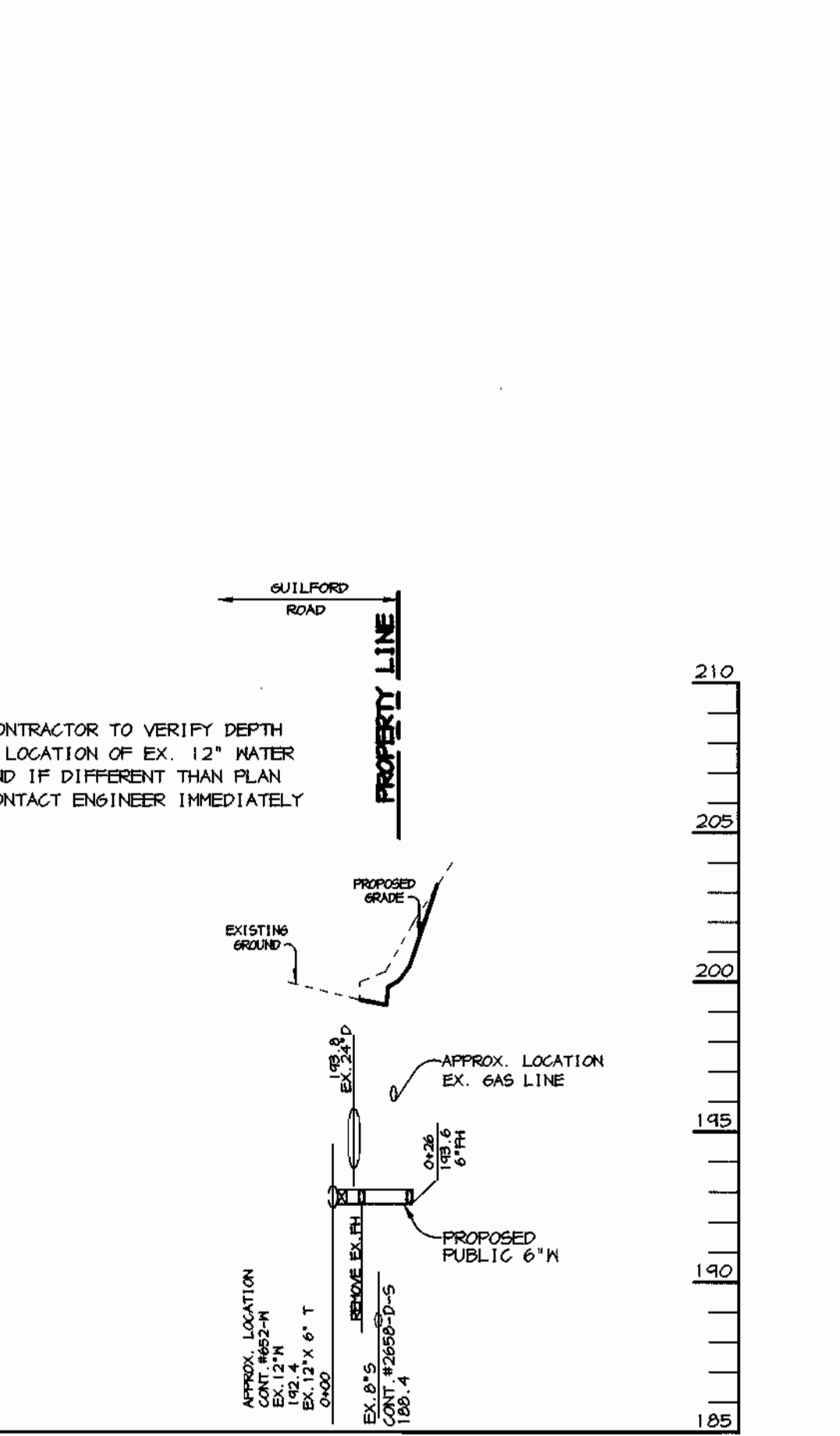
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 SCALE:
 HOR. - 1" = 50'
 VERT. - 1" = 5'



SEWER PROFILE #2
 SCALE:
 HOR. - 1" = 50'
 VERT. - 1" = 5'



WATER PROFILE #6
 SCALE:
 HOR. - 1" = 50'
 VERT. - 1" = 5'



WATER PROFILE #7
 SCALE:
 HOR. - 1" = 50'
 VERT. - 1" = 5'

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
 99300 WSS.DWG



DES: C.J.R.
 DRN: K.E.V.
 CHK: C.J.R.
 DATE: 6/10/99

BY	NO.	REVISION	DATE
		REVISED SEWER PROFILE #1 & 2	4-7-00

**PROFILES OF
 WATER AND SEWER MAINS**

600' SCALE MAP NO. 48 BLOCK NO. 1,7

STAYTON BUSINESS CENTER
 BALTIMORE WASHINGTON INDUSTRIAL PARK
 PARCEL F-1
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT 24-3763-D

SCALE
 AS
 SHOWN

SHEET
 3 OF 3

SHEET INDEX	
NO.	
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILE SHEET

WATER AND SEWER EXTENSIONS


STAYTON BUSINESS CENTER

6th ELECTION DISTRICT

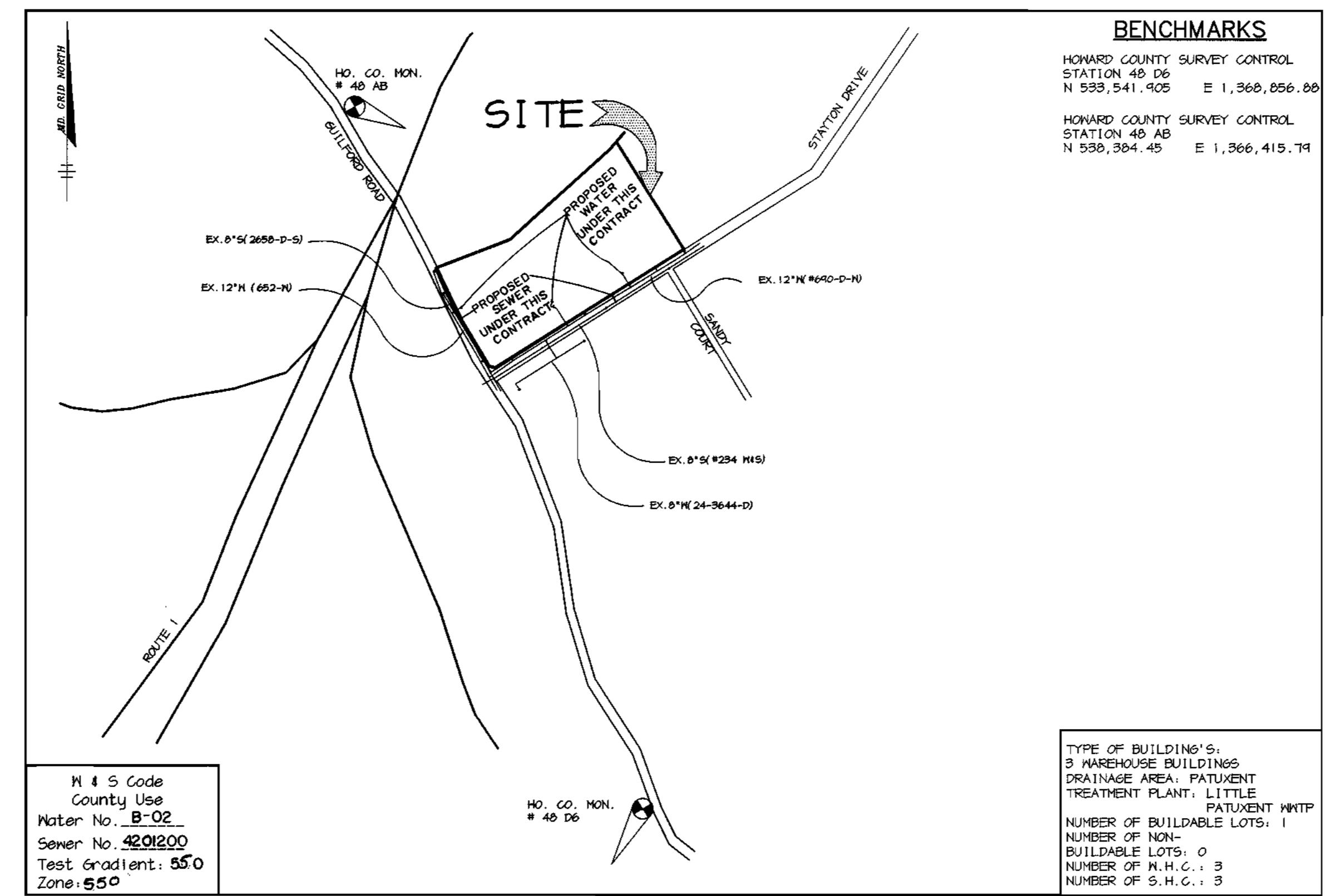
HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3763-D

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	551-5535
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-257-7777
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. 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.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) 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 DPN requirements per Section 10.114(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.



QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	187 LF	200	CL-52	U.S. PIPE
6" WATER	139 LF	140	CL-52	U.S. PIPE
8" VALVES	2 EA.	2	GATE	MOELLER
6" VALVES	2 EA.	2	GATE	"
12" X 8" TSV	2 EA.	2		"
12" X 6" TSV	1 EA.	1		"
8" X 8" T	2 EA.	2		TYLER PIPE
8" X 6" T	1 EA.	1		"
8" 1/8 HD	1 EA.	1		"
FIRE HYDRANTS	4 EA.	4		MOELLER CO.
8" X 6" R	1 EA.			
SEWER MANHOLES	1 EA.	1	PRE-CAST	
8" SEWER	85 LF	85	SDR 35	J.M. MANUFACT.

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-99-102

Review for Howard Soil Conservation District and meets technical requirements.

Sheel Simmons 7/9/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Peterson 7/9/99
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

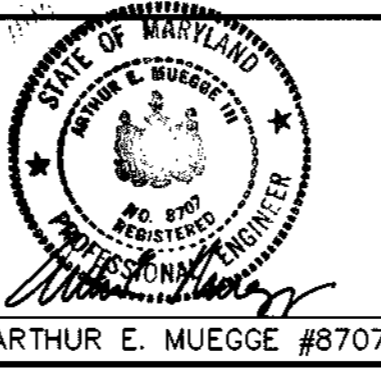
DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

Ruth Berman 7-1-99
CHIEF, BUREAU OF UTILITIES DATE

John Peterson 7/9/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.5282
86369 WSI.DWG

ARTHUR E. MUEGGE #8707



DES: C.J.R.

DRN: K.E.V.

CHK: C.J.R. K.E.V. & A.S.B.

DATE: 6/10/99

BY NO. REVISION DATE

ADJUSTED QUANTITY BOX 4-7.00

TITLE SHEET

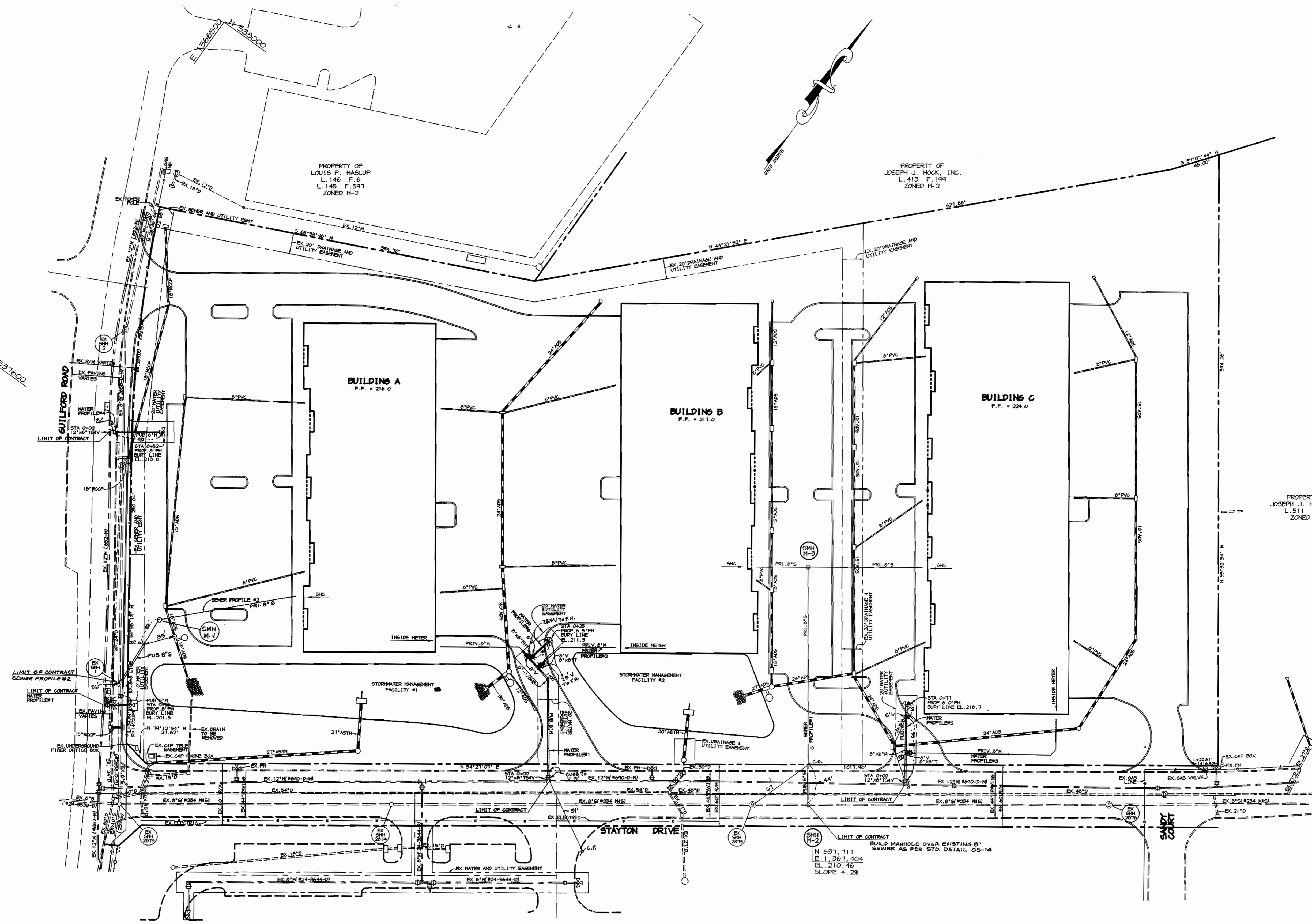
600' SCALE MAP NO. 48 BLOCK NO. L7

STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D

SCALE AS SHOWN

SHEET 1 OF 3

H:\PROJECT\9826\WSD.DWG Thu Jun 10 13:30:36 1999



PLAN
SCALE: 1" = 50'

M:\PROJECT\98303\MS2.DWG Thu Jun 10 13:37:02 1999

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert Rainier
7-1-99
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
H. Rainier
7/1/99
DATE

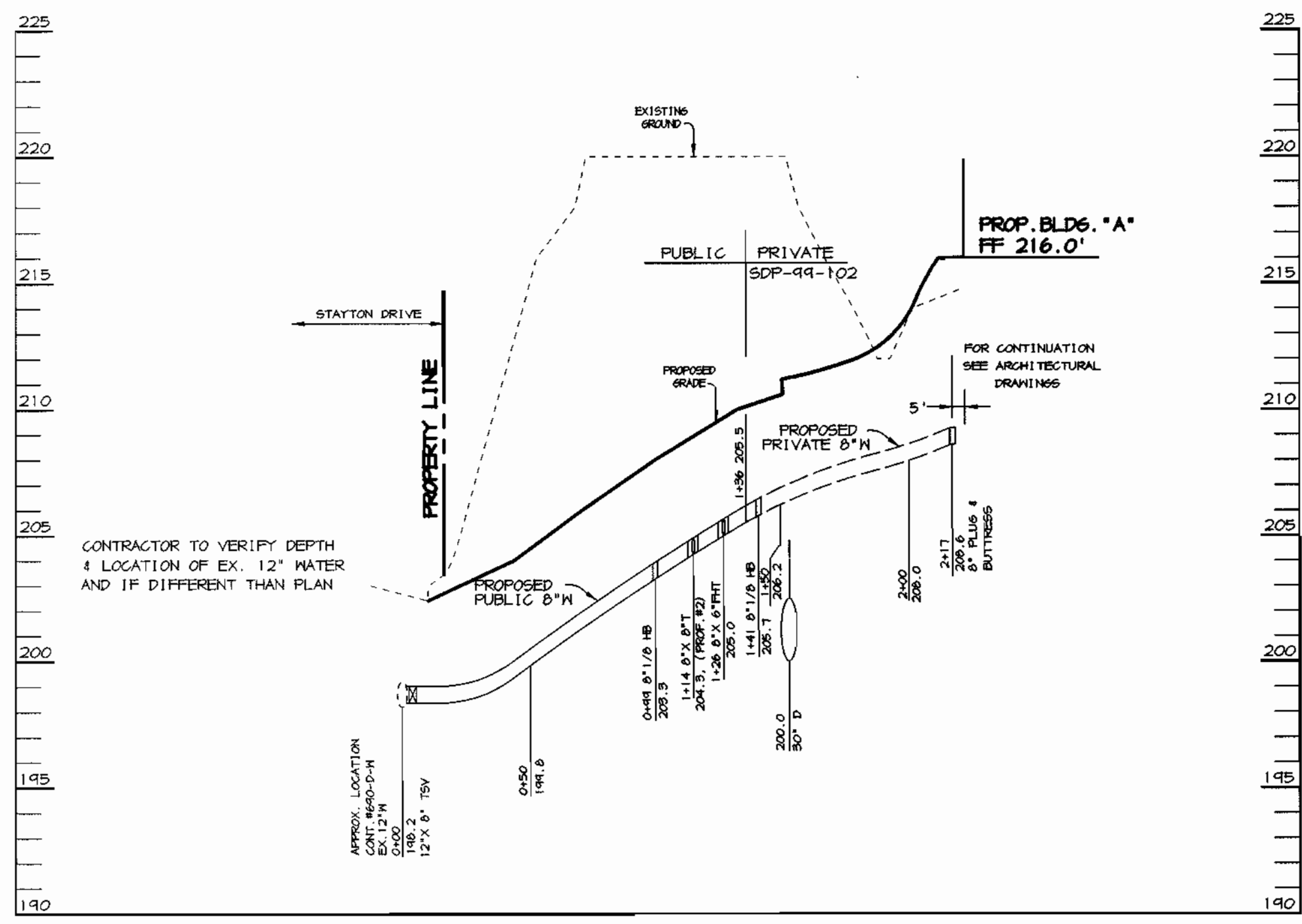
RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
88569 WSD.DWG
Arthur E. Muegge
ARTHUR E. MUEGGE #8707



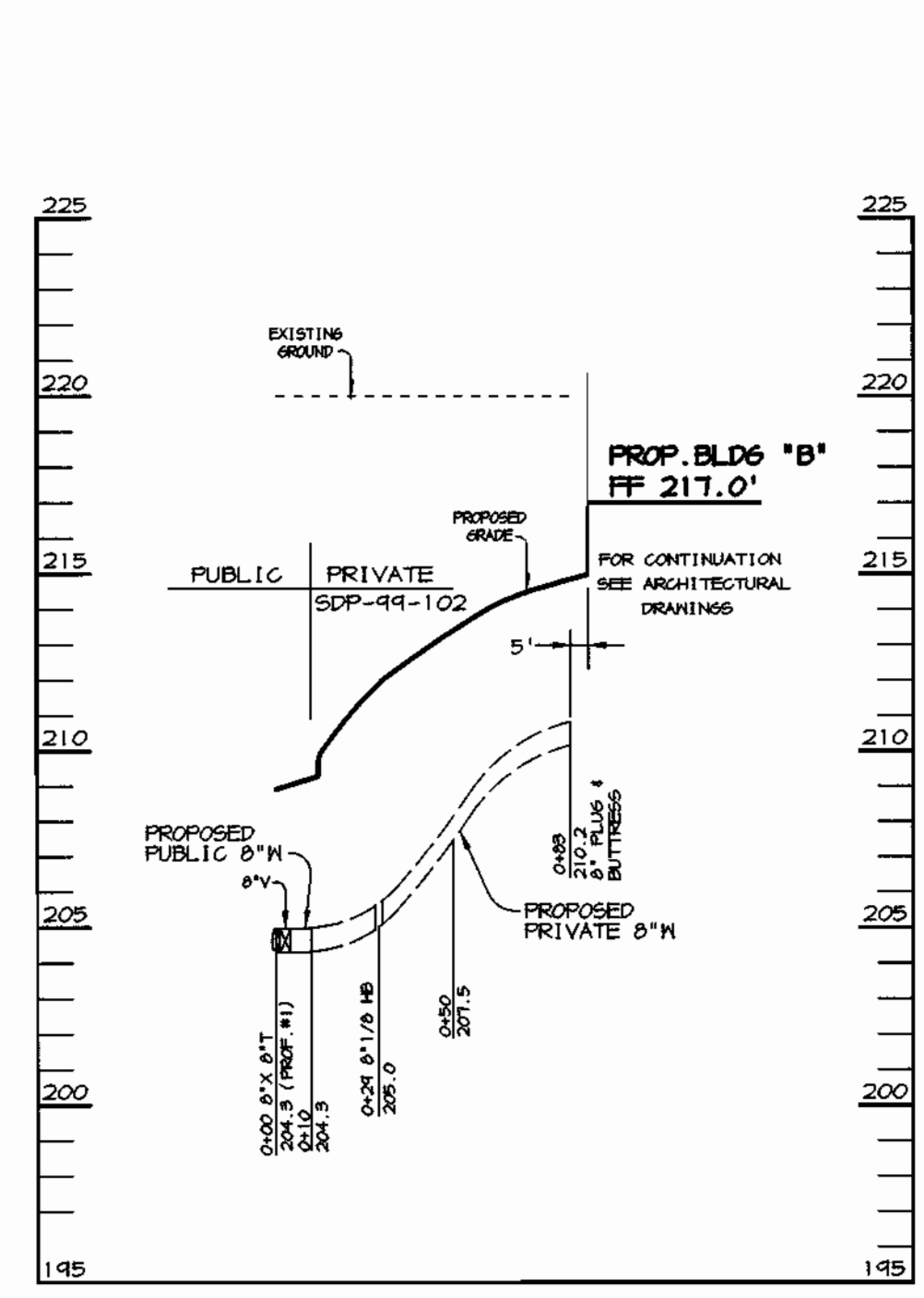
DES:	C.J.R.			
DRN:	K.E.V.			
CHK:	C.J.R.	K.E.I. 2	ADDITIONAL CONDITIONS ADDED TO PLAN	10/26/00
DATE:	6/10/99		RELOCATE SEWER TO BUILDING A	4-7-00
BY:	NO.		REVISION	DATE

PLAN OF
WATER AND SEWER MAINS
600' SCALE MAP NO. 40 BLOCK NO. 1,7

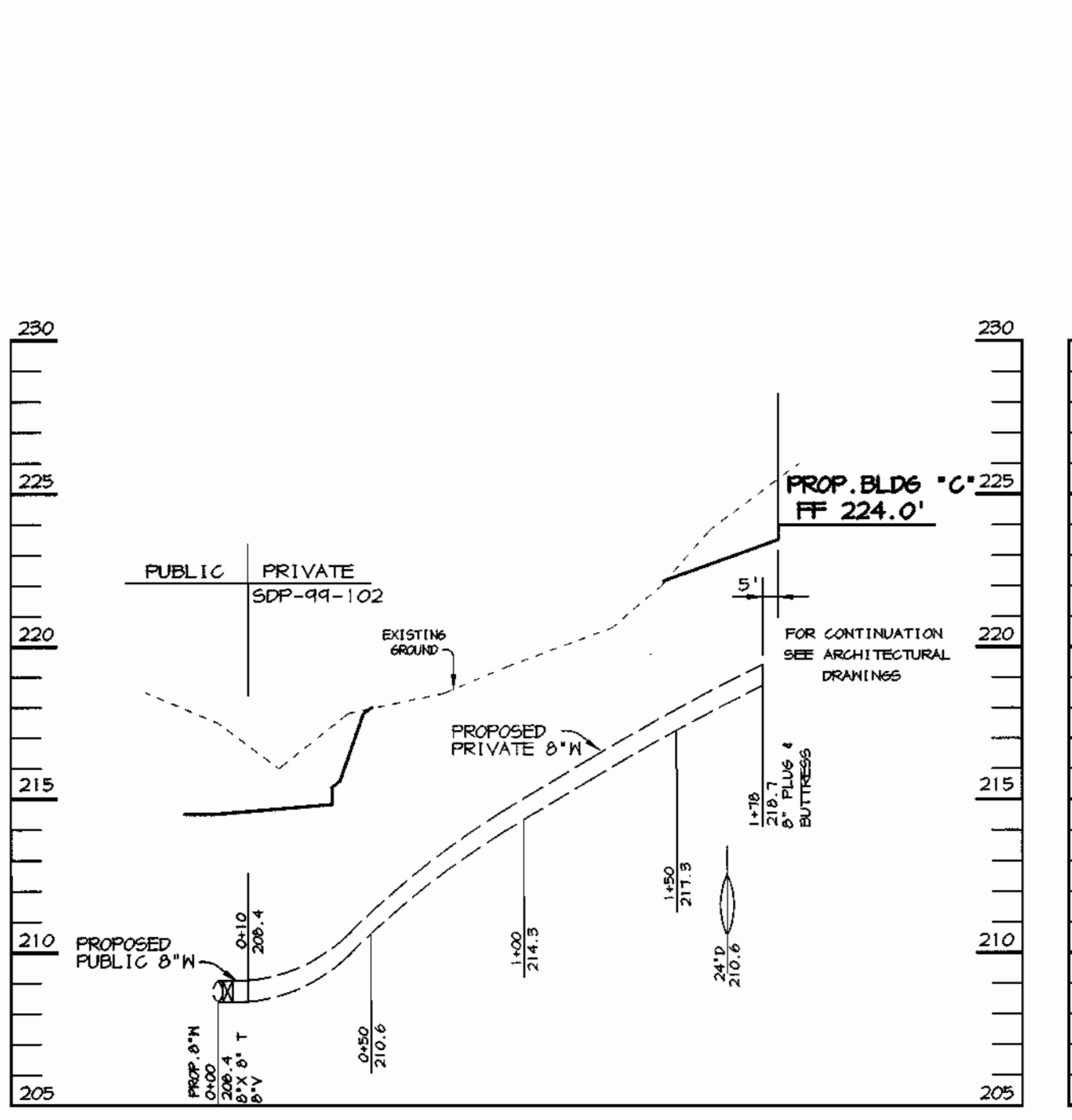
STAYTON BUSINESS CENTER
BALTIMORE WASHINGTON INDUSTRIAL PARK
PARCEL F-1
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3763-D
SCALE AS SHOWN
SHEET 2 OF 3



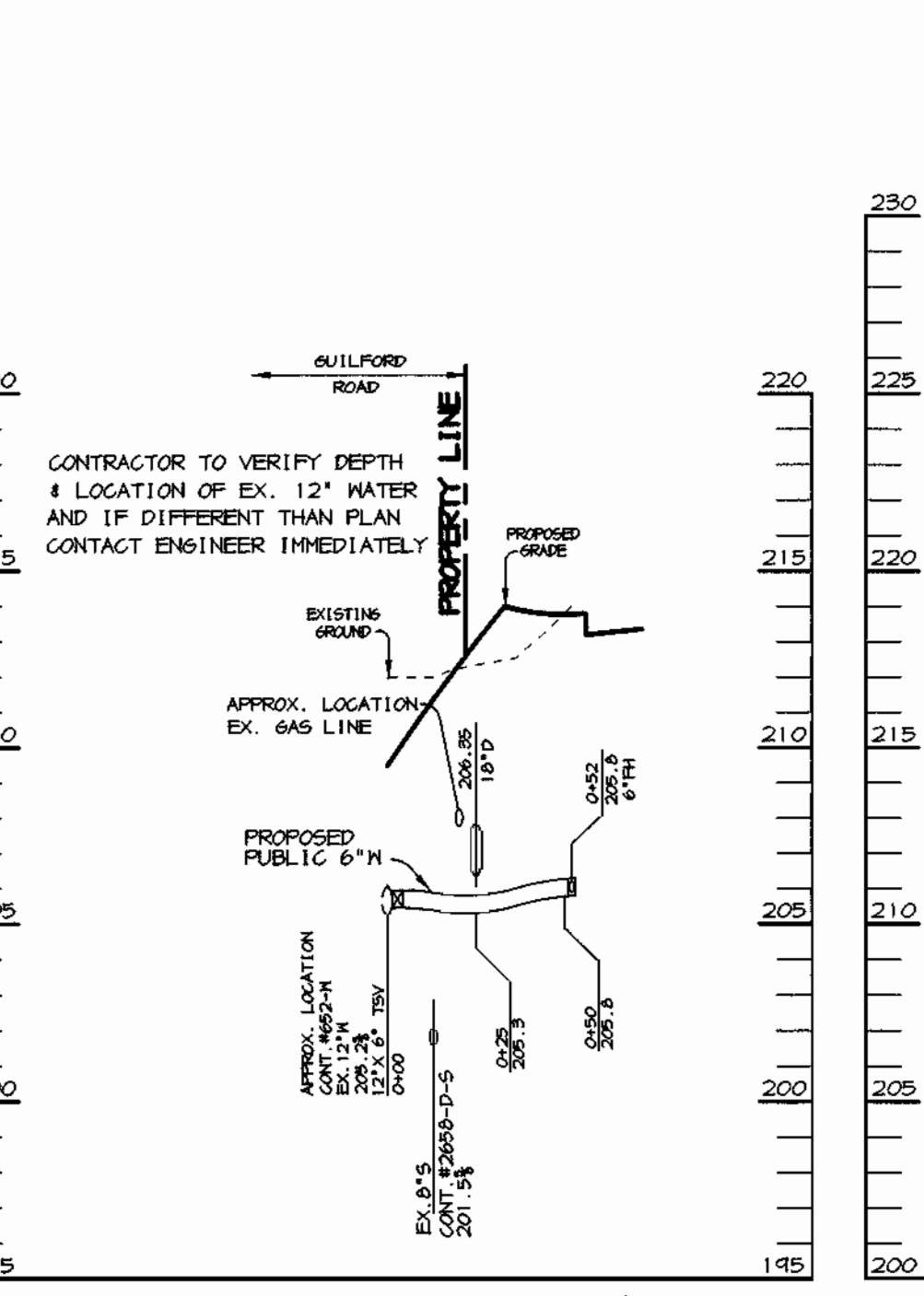
WATER PROFILE #1
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



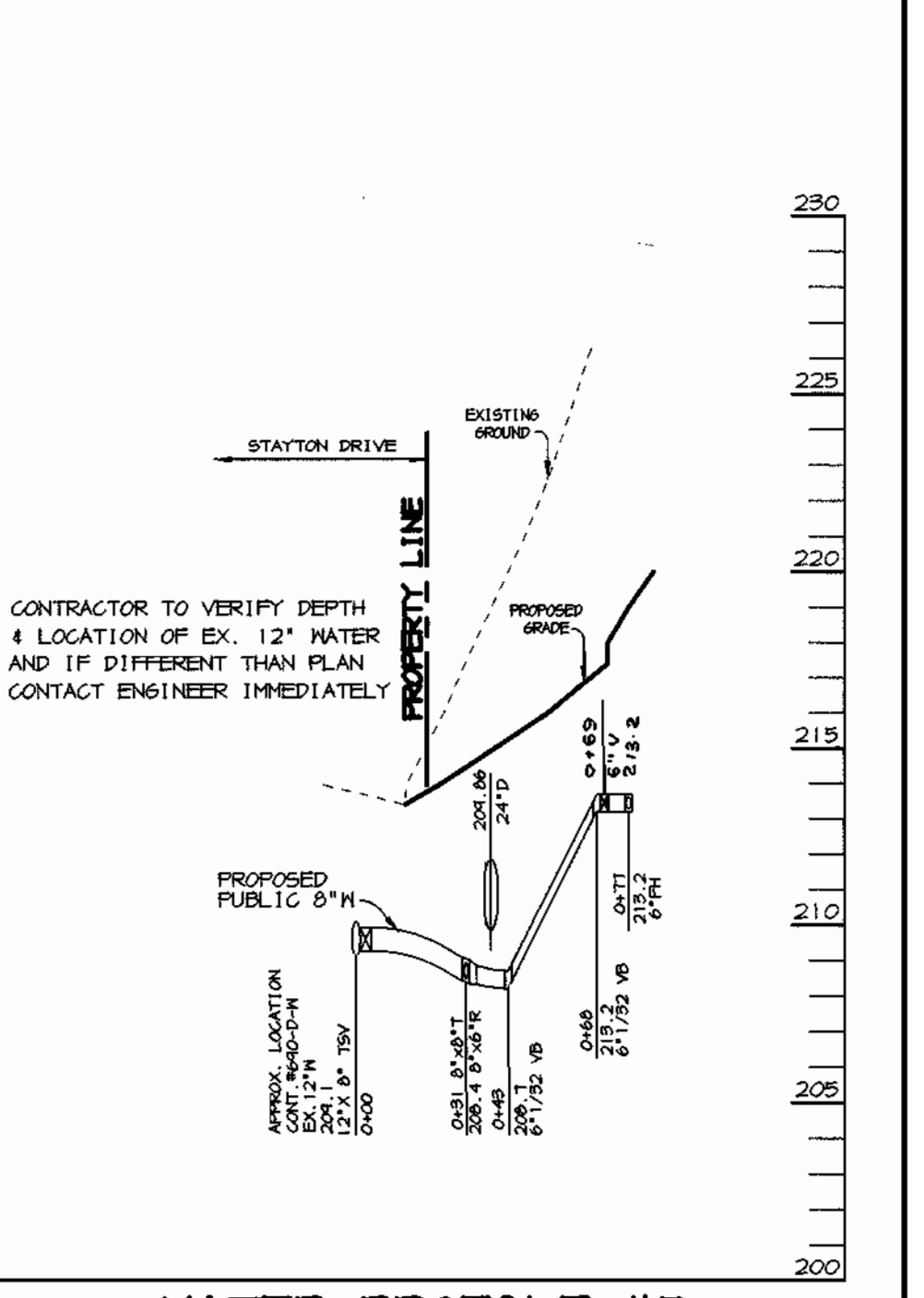
WATER PROFILE #2
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



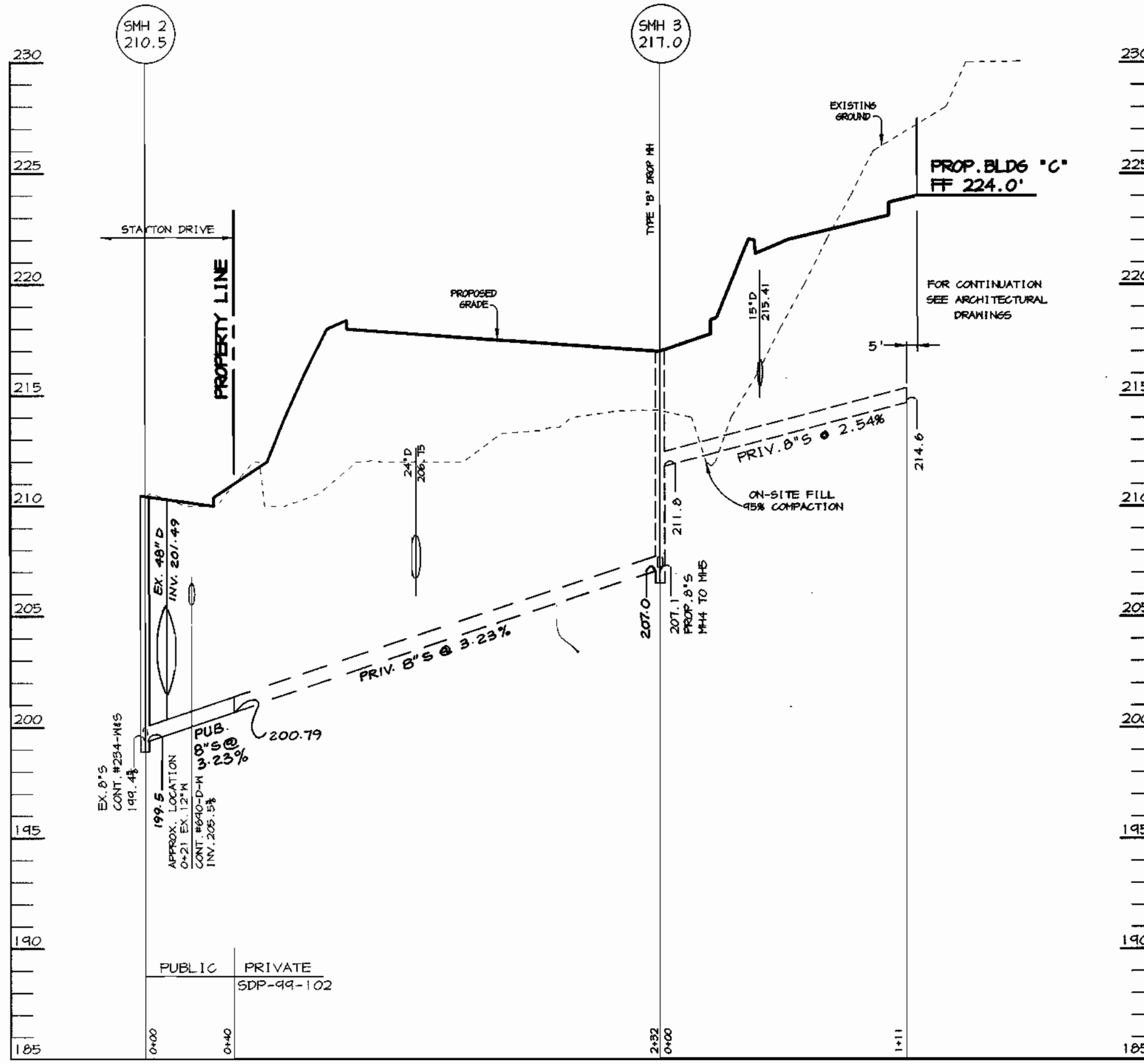
WATER PROFILE #3
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



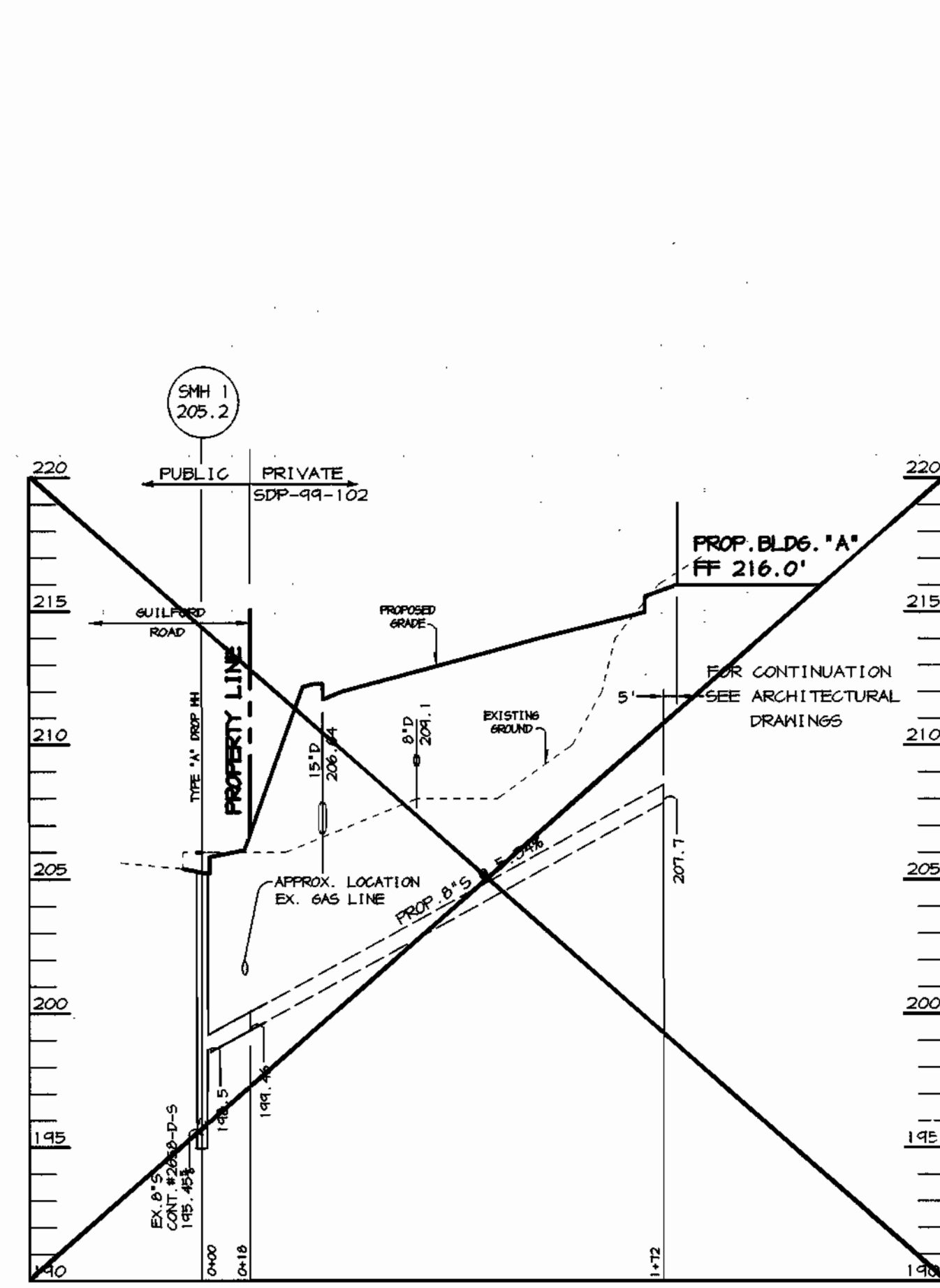
WATER PROFILE #4
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



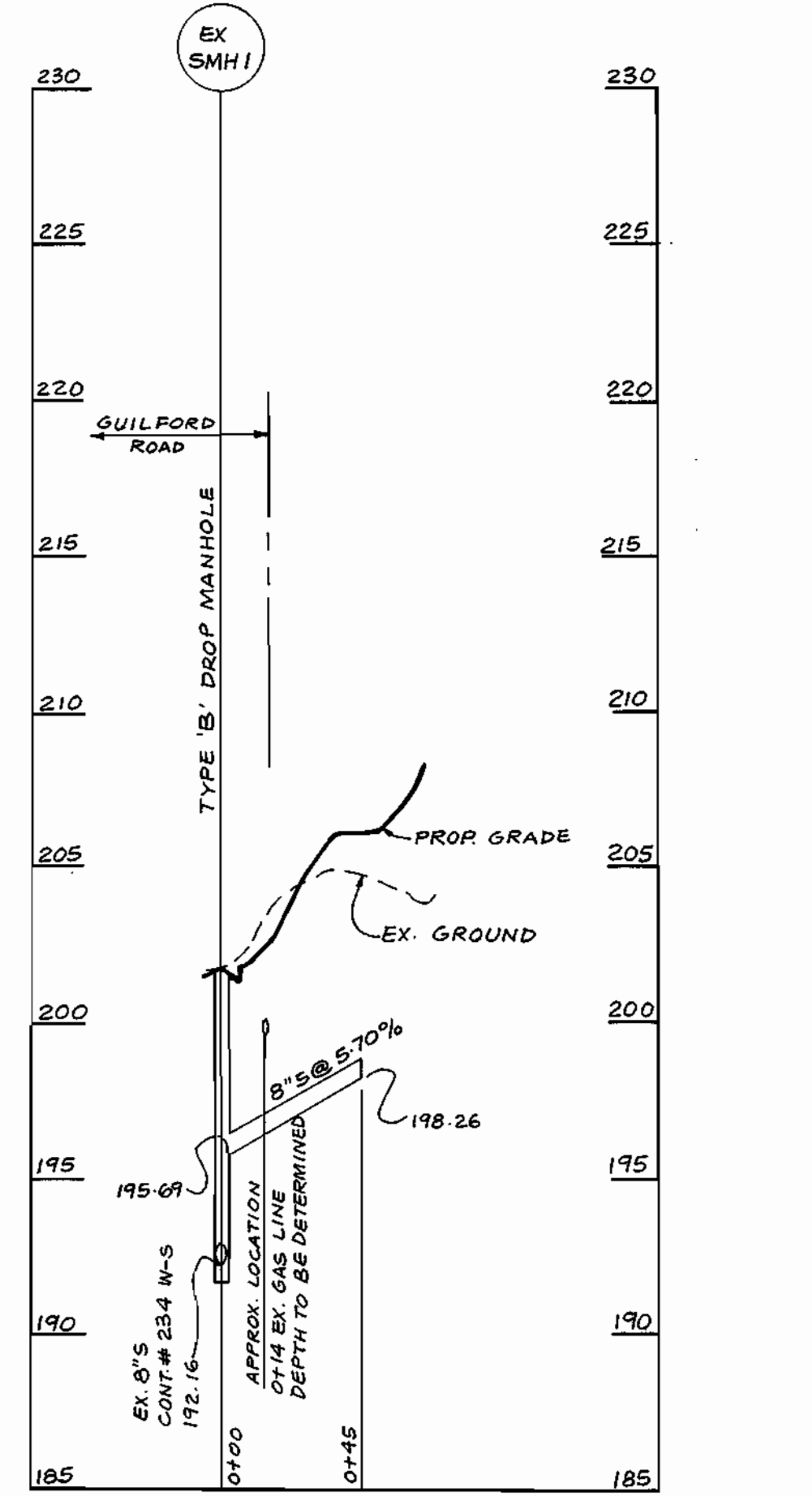
WATER PROFILE #5
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



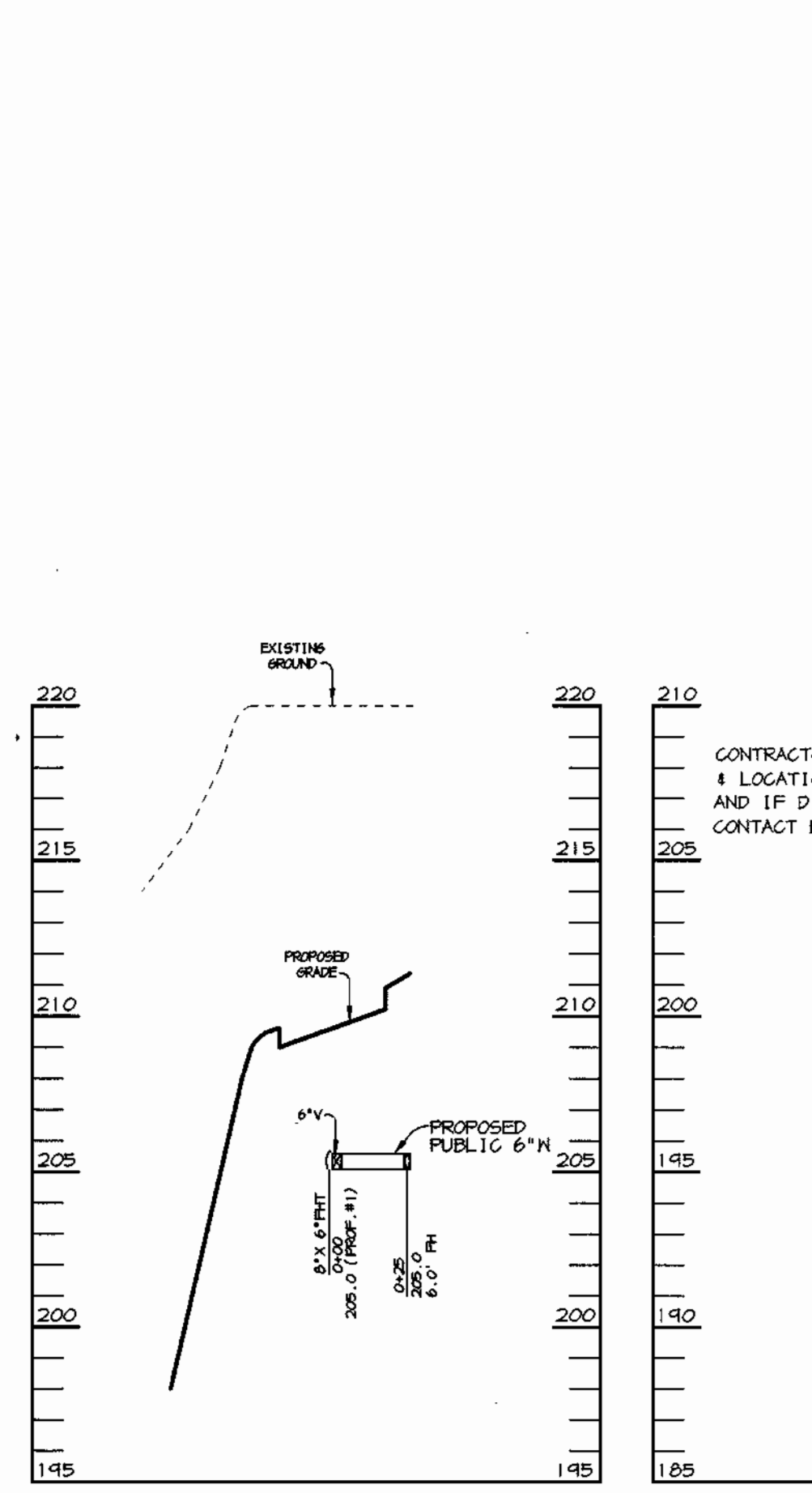
SEWER PROFILE #1
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



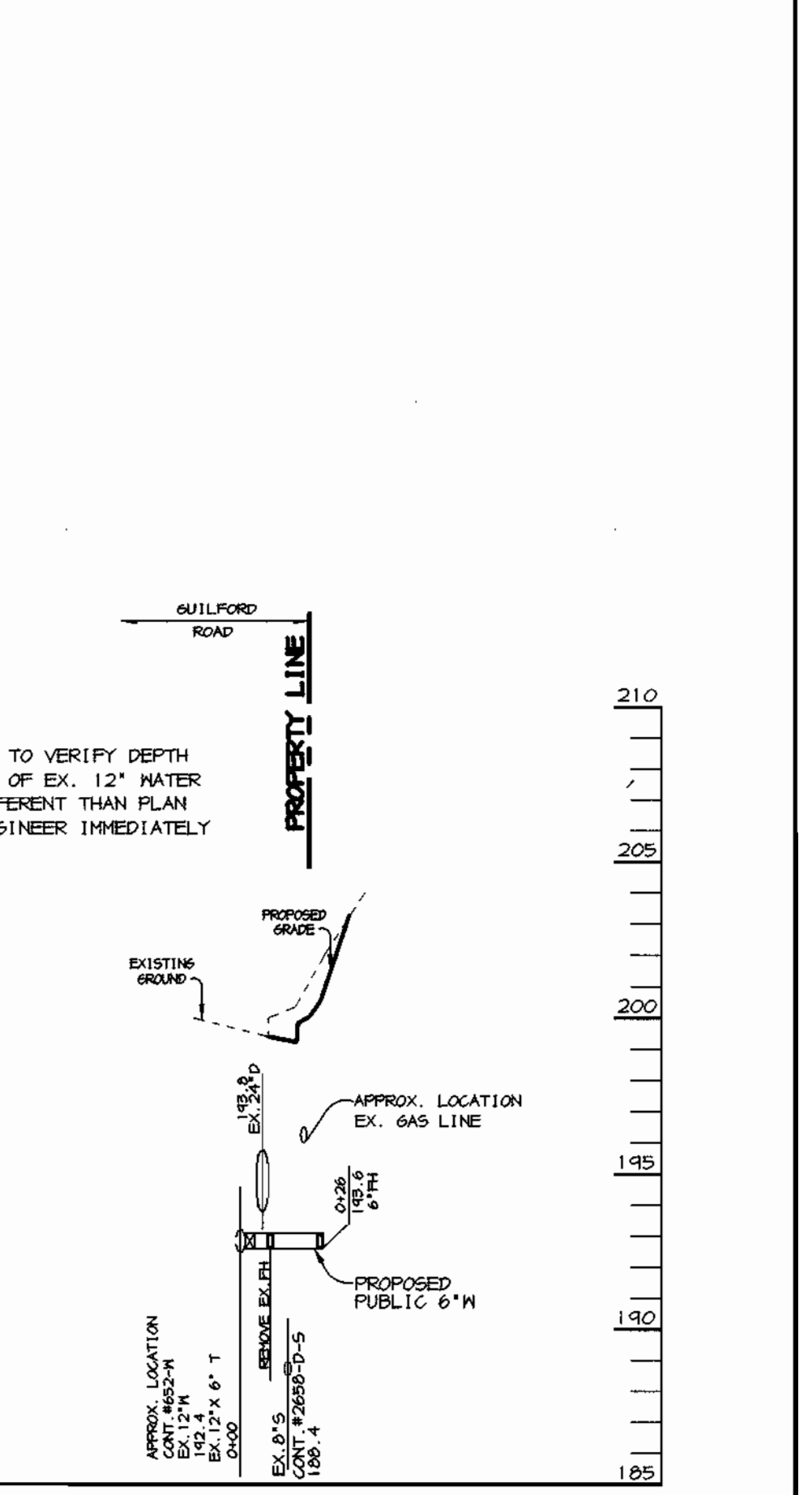
SEWER PROFILE #2
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



SEWER PROFILE #2
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



WATER PROFILE #6
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'



WATER PROFILE #7
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert J. ...</i> CHIEF, BUREAU OF UTILITIES		DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>John ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION		RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 6818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282 06360 WSS.DWG		DES: C.J.R. DRN: K.E.V. CHK: C.J.R. DATE: 6/10/99		REVISIONS 1. REVISED SEWER PROFILE #1 & 2 4-7-00 BY NO. REVISION DATE		PROFILES OF WATER AND SEWER MAINS 600' SCALE MAP NO. 48 BLOCK NO. 1,7		STAYTON BUSINESS CENTER BALTIMORE WASHINGTON INDUSTRIAL PARK PARCEL F-1 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT 24-3763-D		SCALE AS SHOWN SHEET 3 OF 3
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