
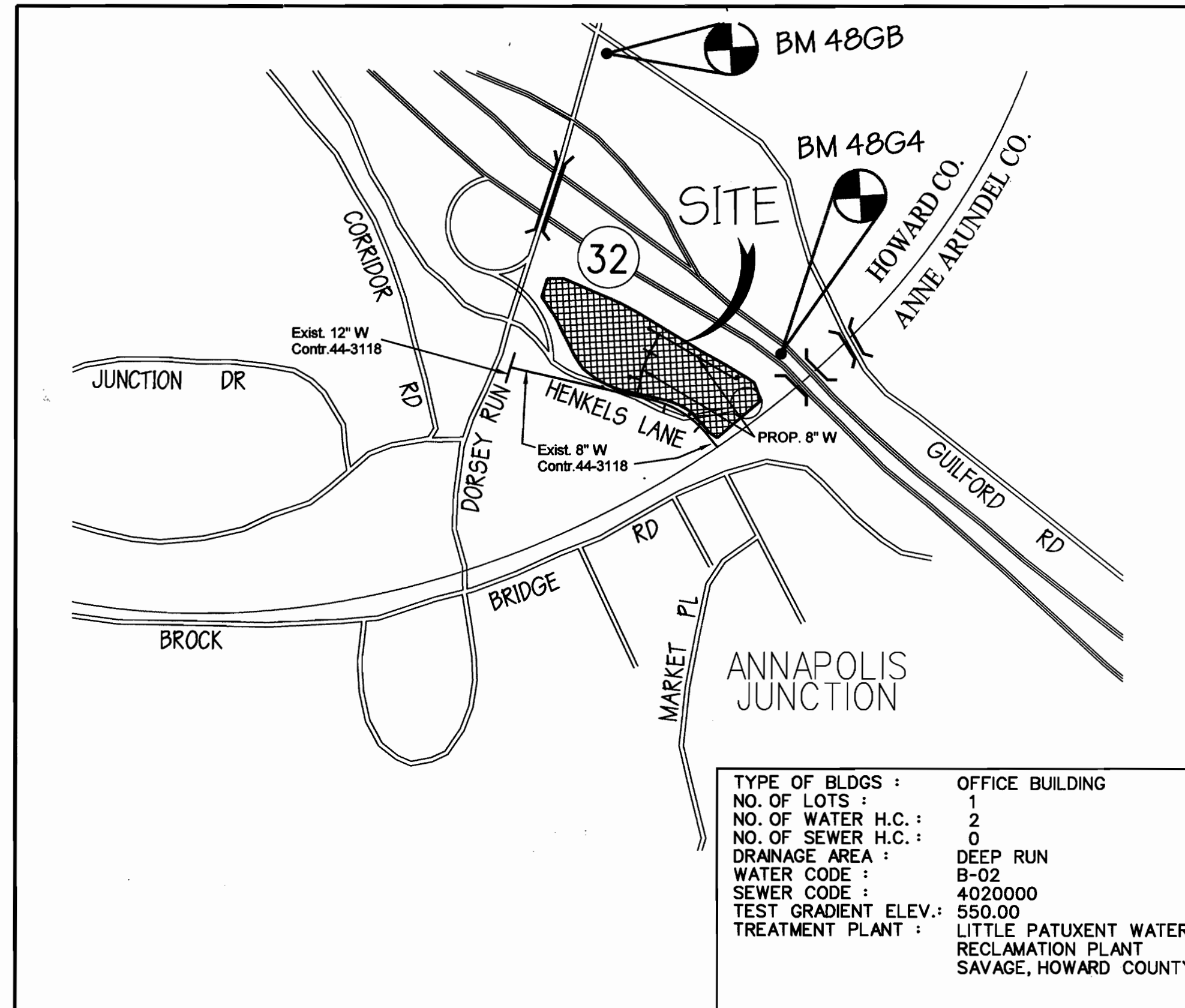


GENERAL NOTES

- 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 tunnels 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	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
- 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 fill areas within future roadway and under structures to be compacted to a minimum of 95% compaction as determined by AASHTO T-180.
- Valves adjacent to tees shall be strapped to tees.
- 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.
- 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 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.
- 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. or P.V.C., unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Manholes to be precast concrete structure.
- Manholes shown with 12" and 16" area are for brick manholes only.



LOCATION MAP

SCALE : 1" = 600'

WATER AND SEWER CONSTRUCTION PLANS

HENKEL PROPERTY

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CONTRACT NO. 24-3765-D

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
8" D.I.P. Water Main	950 L.F.	950	D.I.P.	U.S. PIPE & FOUNDRY
6" D.I.P. Water Main	35 L.F.	35	D.I.P.	U.S. PIPE & FOUNDRY
Fire Hydrants	3 Each	3EA	CENTURION	MJELLER CO.
8"X8" TEE	2 Each	2EA	M.J. D.I.P.	U.S. PIPE & FOUNDRY
8"X6" TEE	3 Each	3EA	D.I.P.	"
8" Valve and Roadway Box	5 Each	5EA	SLIDE TYPE	MUELLER/BINGHAM TAYLOR
6" Valve and Roadway Box	3 Each	3EA	SLIDE TYPE	" / " "
8" x 8" Tapping Sleeve & Valve	1 Each	1EA	D.I.P.	MJELLER CO.
Cap & Buttress	3 Each	3EA	D.I.P.	U.S. PIPE & FOUNDRY
8"X8" Cross	1 Each	1EA	D.I.P.	"
8" P.V.C. Sanitary Sewer	10 L.F.	10L.F.	SDR-35	J.M. MANUFACTURING

NAME OF UTILITY CONTRACTOR : C.T.G.
 SURVEY AND DRAFTING DIVISION AS-BUILT DATE _____

INDEX OF SHEETS

SHEET NO.	TITLES
1	COVER SHEET, GENERAL NOTES & LOCATION MAP
2	PLAN VIEW
3	PROFILES

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 99-94

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

APPROVED :  4/21/99
 HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

 4/21/99
 U.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER / CONTRACTOR / PURCHASER

MERRITT - HK, LLC

2066 LORD BALTIMORE DR.,
 BALTIMORE, MD 21207
 (410) 298-2600

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND



**GEORGE W. STEPHENS, JR.
 AND ASSOCIATES, INC.**

Civil Engineers and Land Surveyors

658 Kenilworth Drive, Suite 100
 Towson Maryland 21204
 (410) 825-8120



DESIGNED : J.N.L., K.E.
 DRAFTED : J.N.L., K.E.
 CHECKED : P.R.C., K.E.

COVER SHEET, GENERAL NOTES & LOCATION MAP

CONTRACT NO. 24-3765-D

600 SCALE MAP NO. 48

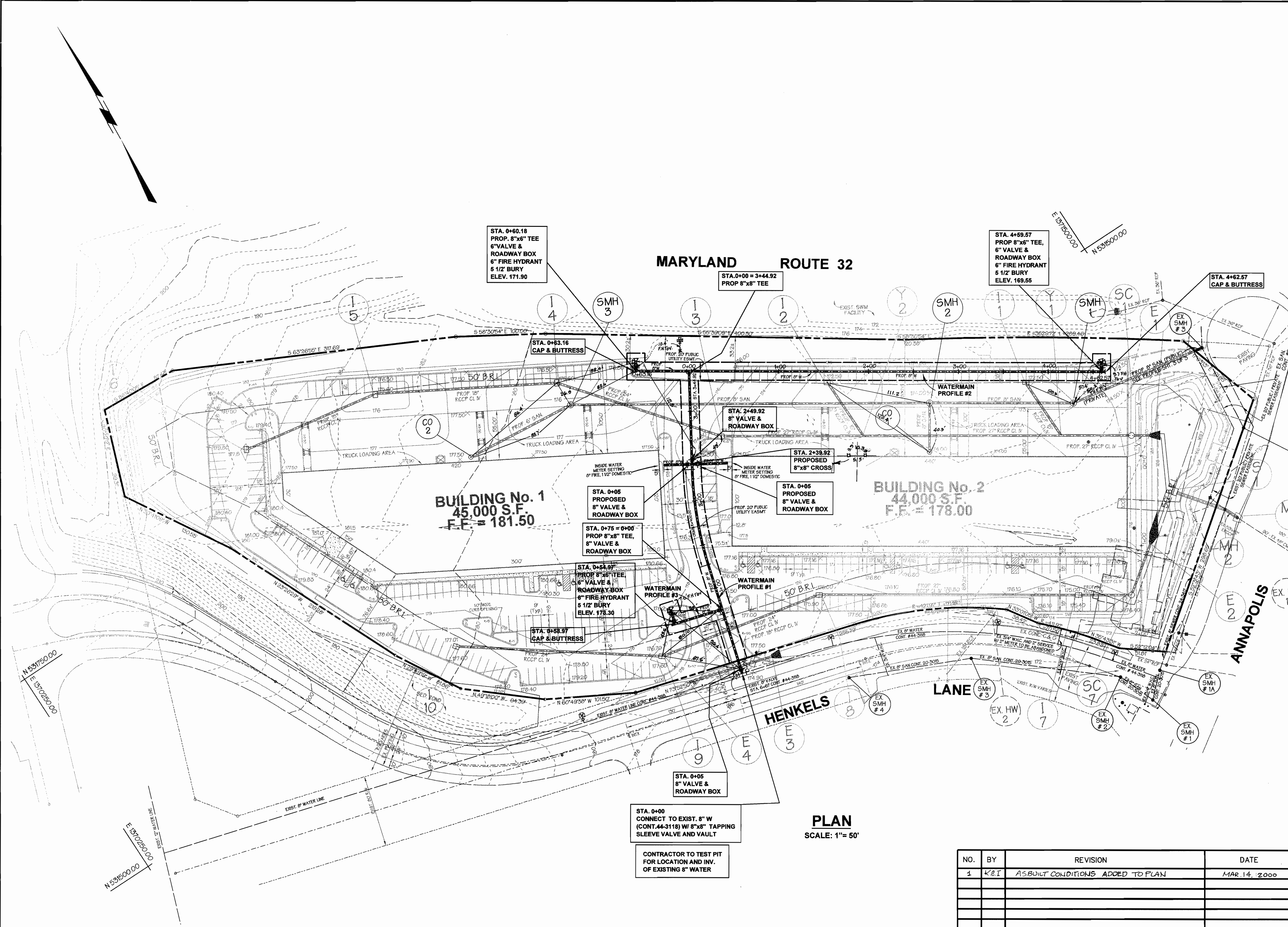
BLOCK NO. 20

BY	NO.	REVISION	DATE
K.C.I.	1	AS-BUILT CONDITIONS SHOWN ADDED TO PLAN	MAR 14, 2000

**PUBLIC WATER AND SEWER
 THE HENKEL PROPERTY**

HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT *06

FEBRUARY 16, 1999
 SHEET 1 OF 3



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 99-94

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

APPROVED :
 HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER / CONTRACTOR / PURCHASER

MERRITT - HK, LLC
 2066 LORD BALTIMORE DR.
 BALTIMORE, MD 21207
 (410) 298-2600

NO.	BY	REVISION	DATE
1	KBI	AS-BUILT CONDITIONS ADDED TO PLAN	MAR 14, 2000

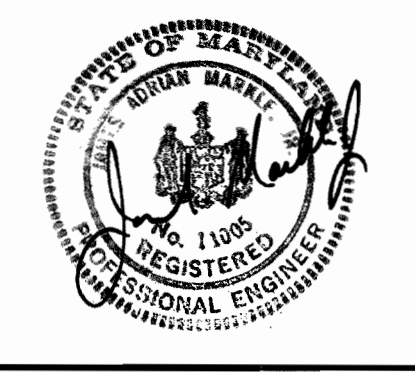
PLAN
 SCALE: 1"= 50'

CONTRACTOR TO TEST PIT FOR LOCATION AND INV. OF EXISTING 8" WATER

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert Bainger 4-13-99
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 [Signature] 4/24/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

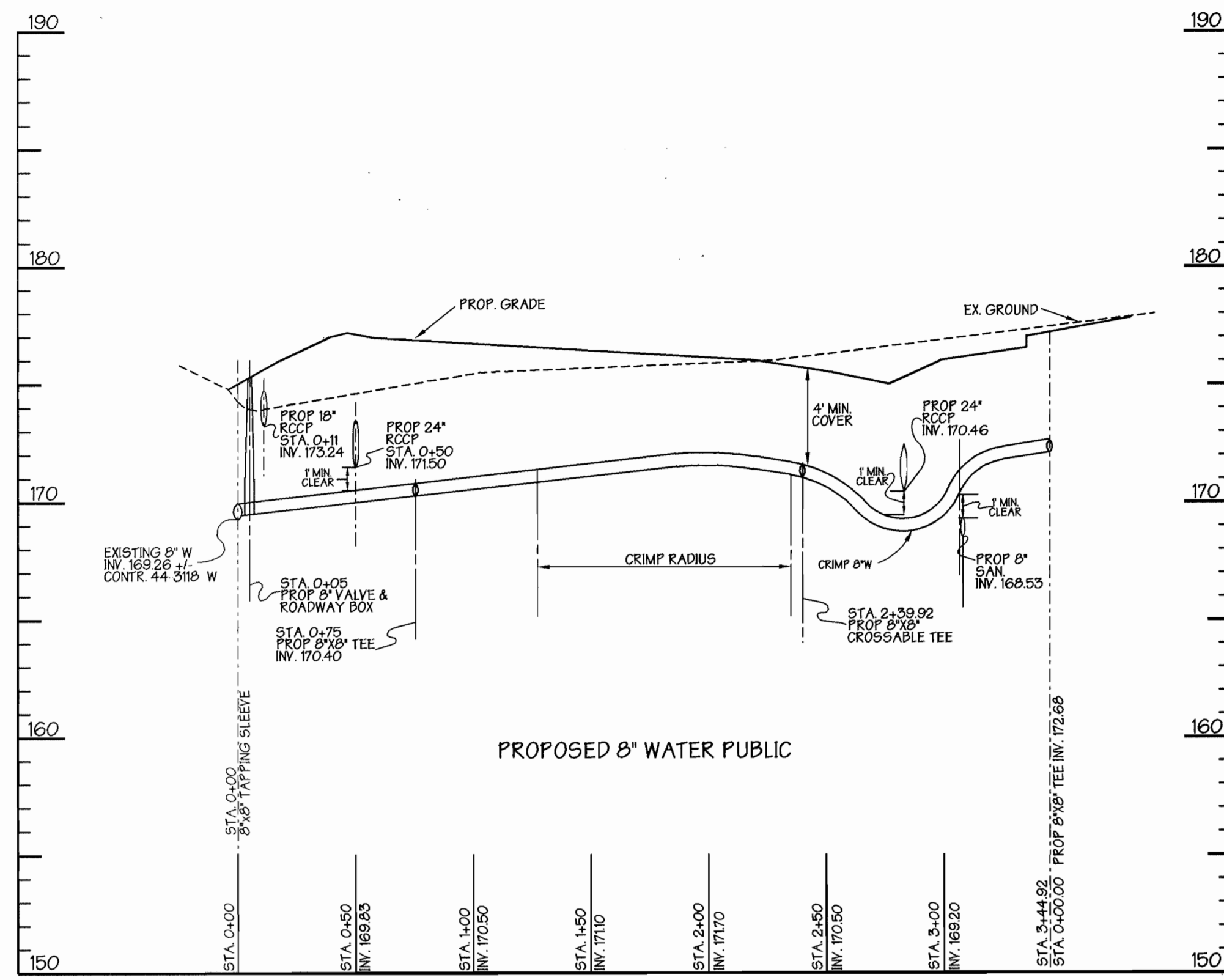
GWS
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson Maryland 21204
 (410) 825-8120



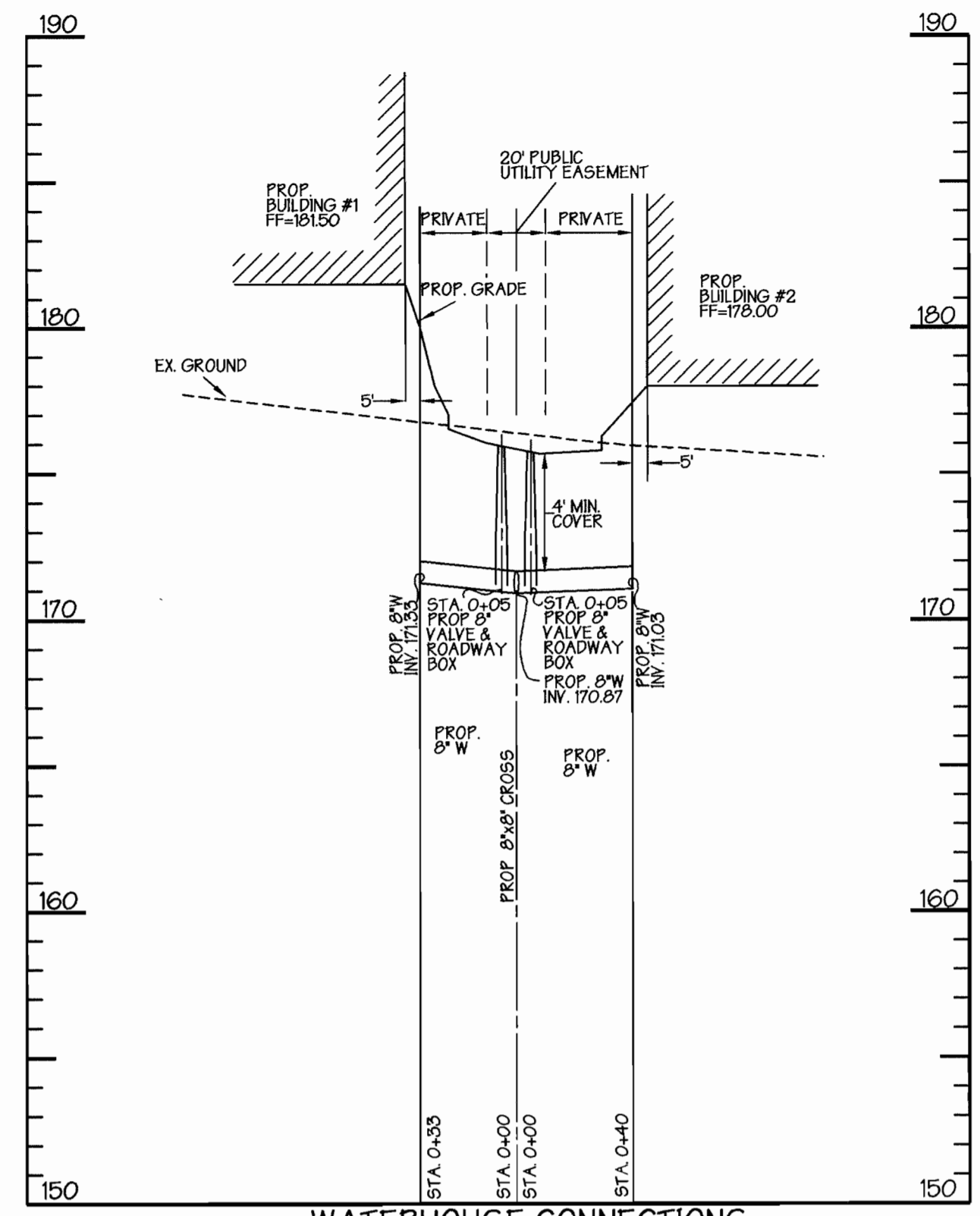
DESIGNED : J.N.L., K.E.
 DRAFTED : J.N.L., K.E.
 CHECKED : P.R.C., K.E.

PLAN VIEW
 CONTRACT NO. 24-3765-D
 600 SCALE MAP NO. 48
 BLOCK NO. 20

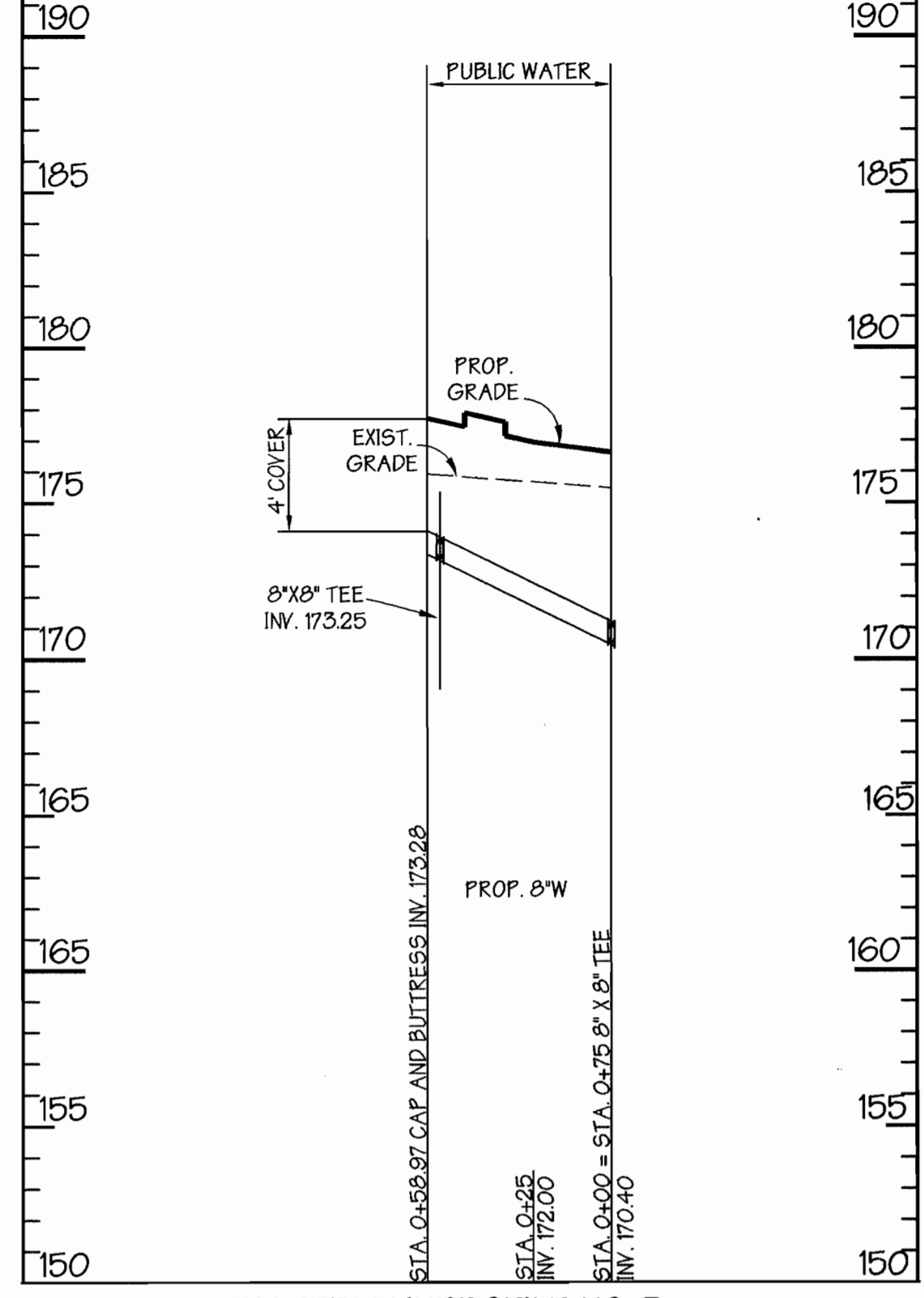
PUBLIC WATER AND SEWER PLAN
THE HENKEL PROPERTY
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT #6
 FEBRUARY 16, 1999
 SHEET 2 OF 3
 P/N 8976001pwater.s01



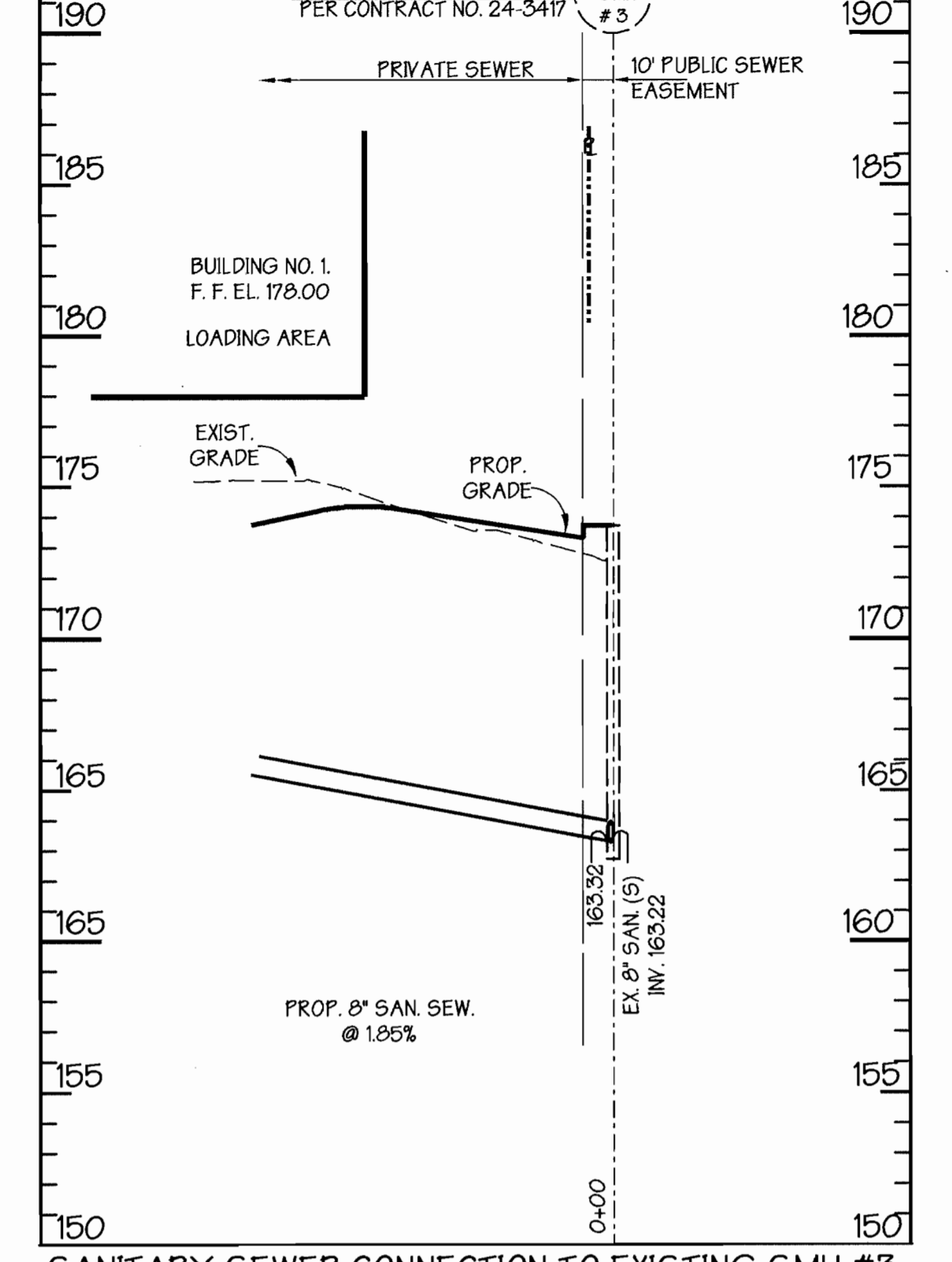
WATERMAIN PROFILE NO. 1
SCALE: HORIZ = 1"=50'
VERT = 1"=5'



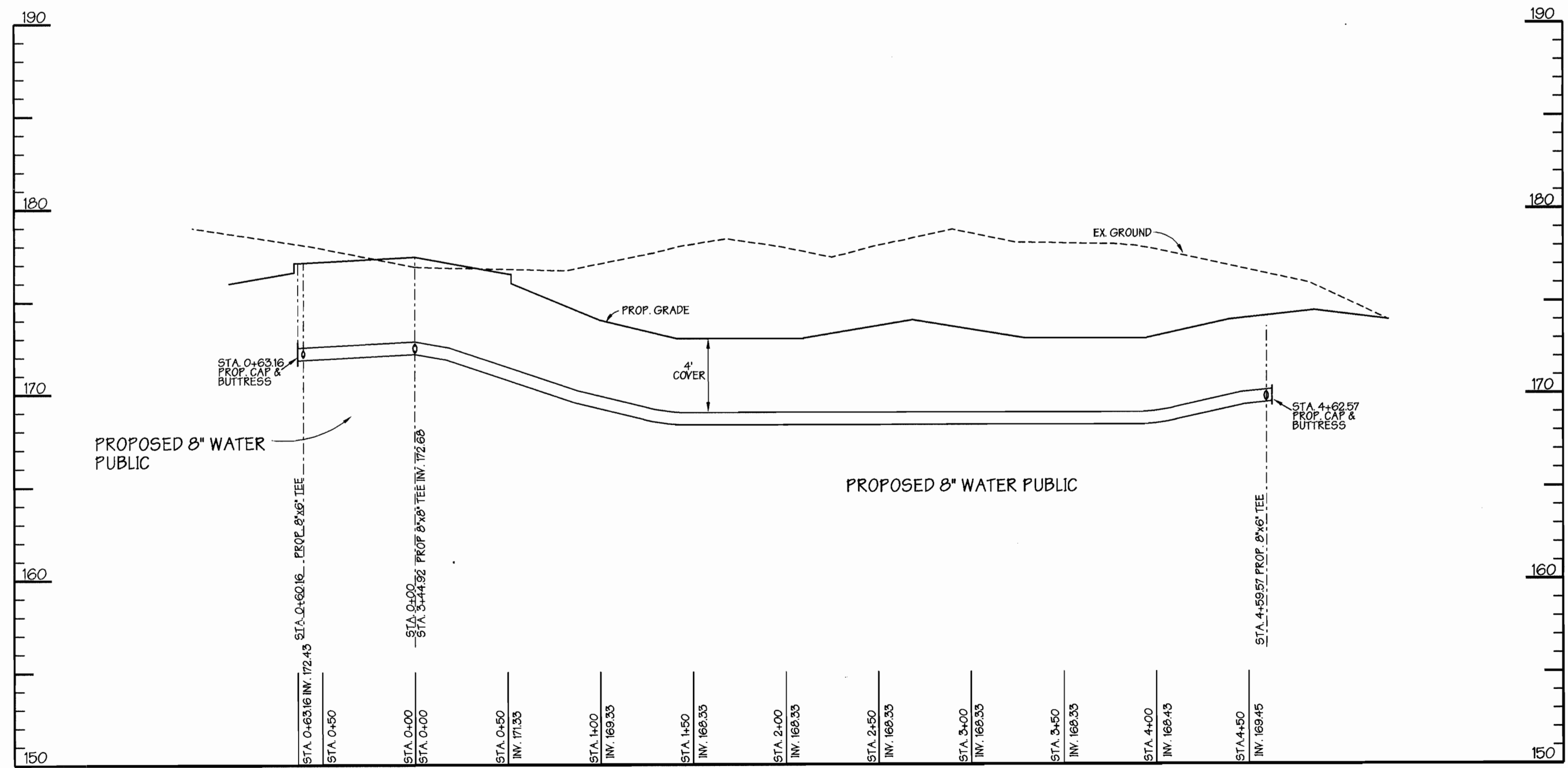
WATERHOUSE CONNECTIONS
SCALE: HORIZ = 1"=50'
VERT = 1"=5'



WATERMAIN PROFILE NO. 3
SCALE: HORIZ = 1"=50'
VERT = 1"=5'



SANITARY SEWER CONNECTION TO EXISTING SMH #3
SCALE: HORIZ = 1"=50'
VERT = 1"=5'



WATERMAIN PROFILE NO. 2
SCALE: HORIZ = 1"=50'
VERT = 1"=5'

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 99-94

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

APPROVED :
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE DATE

OWNER / DEVELOPER / CONTRACTOR / PURCHASER

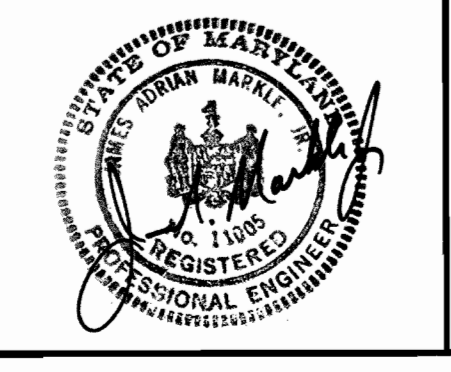
MERRITT - HK, LLC
2066 LORD BALTIMORE DR.
BALTIMORE, MD 21207
(410) 298-2600

NO.	BY	REVISION	DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ...
CHIEF, BUREAU OF UTILITIES
DATE 4-13-99

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
...
CHIEF, DEVELOPMENT
ENGINEERING DIVISION
DATE 4/16/99

GEORGE W. STEPHENS, JR.
AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson Maryland 21204
(410) 825-8120



DESIGNED : J.N.L., K.E.
DRAFTED : J.N.L., K.E.
CHECKED : P.R.C., K.E.

PROFILES
CONTRACT NO. 24-3765-D
600 SCALE MAP NO. 48
BLOCK NO. 20

PUBLIC WATER AND SEWER PROFILES
THE HENKEL PROPERTY
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT #6
FEBRUARY 16, 1999
SHEET 3 OF 3
P/N 8976 - waterprof.s01