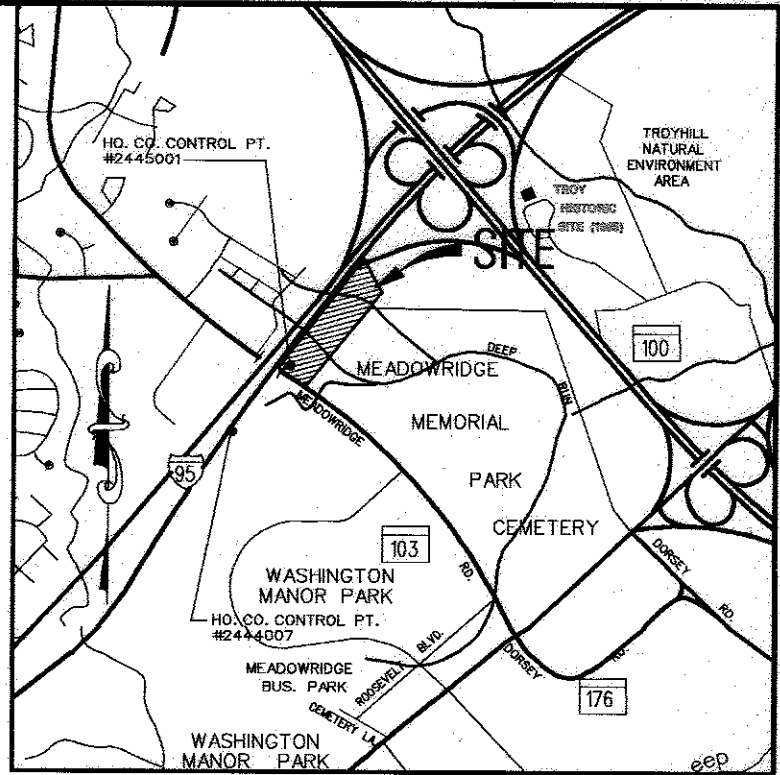


PUBLIC WATER AND SEWER PLANS

KANE COMPANIES HEADQUARTERS

HOWARD COUNTY, MARYLAND
CONTRACT NO. 14-4086-D



VICINITY MAP
SCALE: 1" = 2000'

BENCHMARKS

THE COORDINATES SHOWN HEREON ARE BASED ON THE FOLLOWING HOWARD COUNTY GEODETIC CONTROL CONTROLS WHICH ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.

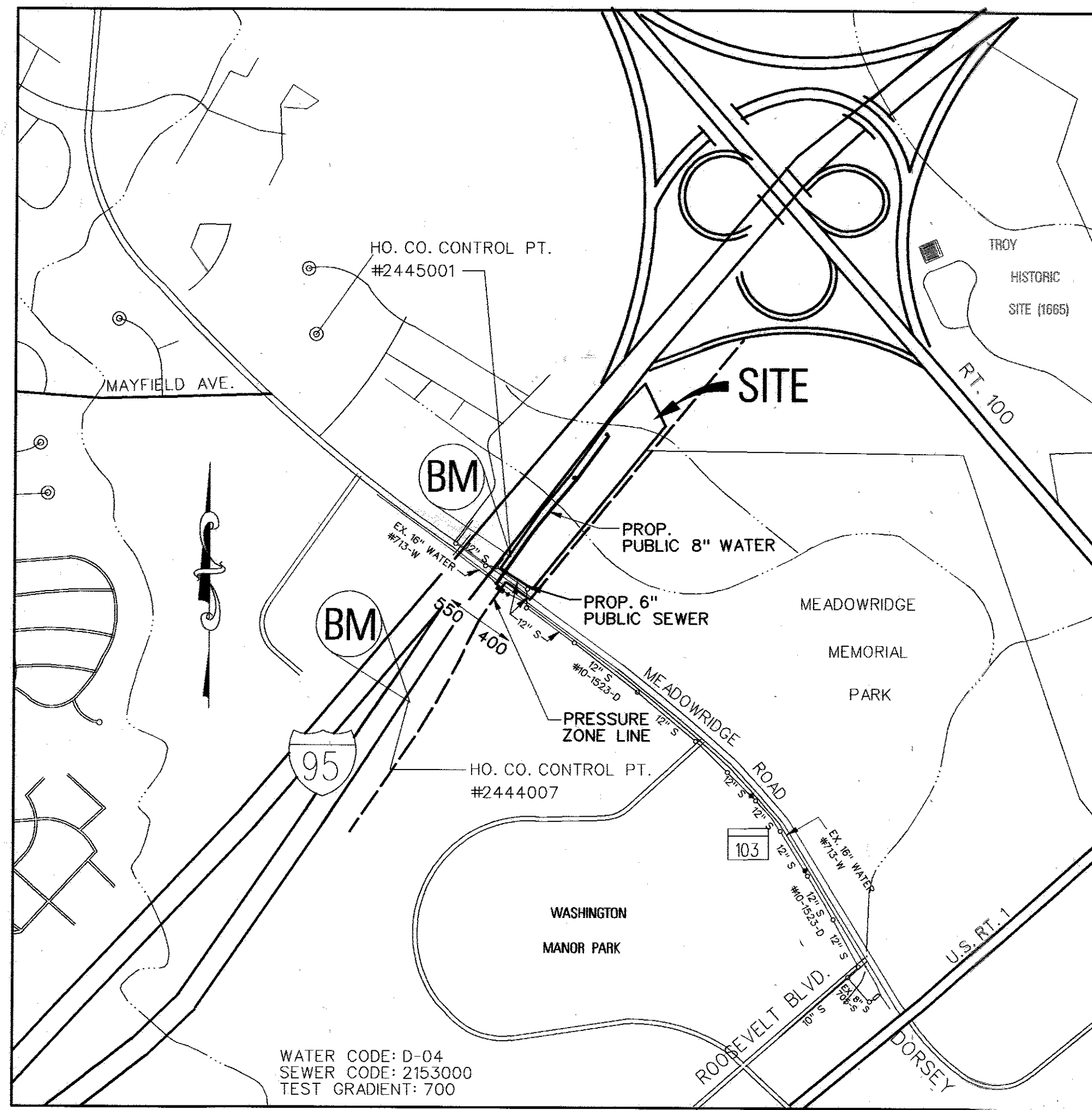
CONTROL #2444007	N 493871.217	E 863850.985	EL. 252.125 FT.
CONTROL #2445001	N 494663.186	E 864478.479	EL. 245.095 FT.

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. (NORTH AMERICAN DATUM OF 1983 INAD '83).
- 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.
- CONTRACTORS SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

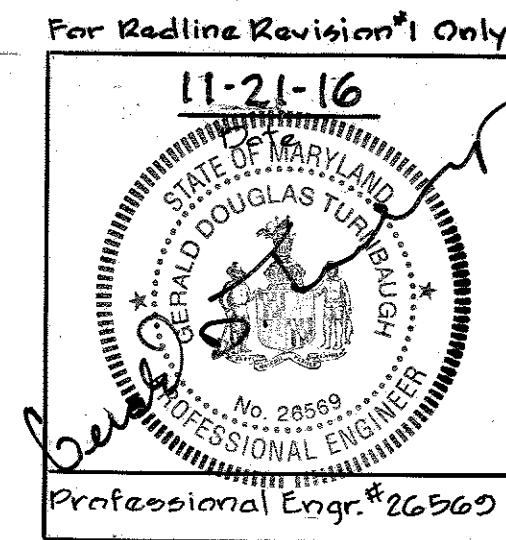
STATE HIGHWAY ADMINISTRATION	410-531-5533
BCE CONTRACTOR SERVICES	410-850-4820
BOE UNDER GROUND DAMAGE CONTROL	410-291-4607
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	410-549-4120
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	410-313-4900
BUREAU OF UTILITIES	1-800-446-5266
BELL ATLANTIC	1-800-MFS-CITY
MCIWORLD.COM	
- 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 OR EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-2450 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.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5' 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 STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWING. 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.
- WATER HOUSE CONNECTION SHALL BE FOR OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.
- TOPO TAKEN FROM FIELD SURVEY DATED APRIL 1989 BY KCI TECHNOLOGIES, INC.
- ALL COORDINATES ARE BASED ON HOWARD COUNTY GEODETIC CONTROL TRAVERSE WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. REFERENCE HOWARD COUNTY CONTROL POINTS 2445001 (ELEV. 245.095) & 2444007 (ELEV. 252.125).
- THE WATER PRESSURE ZONE FOR THIS CONTRACT IS 550.
- WATER LINE WILL BE PUBLIC AND THE SANITARY SEWER WILL BE PRIVATE. THE EXISTING 16" WATER IS CONTRACT NO. 713-W AND THE EXISTING 8" SANITARY SEWER IS CONTRACT NO. 10-1523-D. THE PROPOSED METER WILL BE LOCATED INSIDE BUILDING ON SITE AND WILL BE PRIVATE.
- 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.
- PRIVATE FORCE MAINS SHALL BE PVC WITH GASKET JOINTS ONLY.
- FIRE HYDRANTS TO BE SET 3' BEHIND CURB LINE.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.

QUANTITIES				
NAME OF UTILITY CONTRACTOR: <i>ACORONI SITE SPECIALIST INC.</i>				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				
ITEMS	PUBLIC QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" D.I.P. CL. 52	1006 ft.	1015	CL62 DIP	TYLER PIPE
6" D.I.P. CL. 52	26 ft.	25	"	"
VALVES (8"/6")	2/2	2/2	DIP	CAPTROL
FIRE HYDRANTS	2	2		TYLER PIPE
HOUSE CONN.	1	1		"
8" WATER METER	1			"
8" X 6" REDUCER	1	1		TYLER PIPE
8" X 6" TEE	1	1		"
8" X 8" TEE	1	1		"
SEWER MANHOLE	0	1		ATLANTIC
6" PVC	13.5 ft.	10		CAPTROL
8" X 16" TAPPING SLEEVE	1	1		TYLER PIPE



PLAN VIEW
SCALE: 1" = 600'

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 26969 Expiration Date: 7-18-17



THIS SET OF PLANS SUPERCEDES THE ORIGINAL PLANS DATED JAN. 6, 2003 FOR CONTRACT NO. 14-4086-D.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS SDP-02-53.

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

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

John R. Robertson 1/8/04 DATE
Jim Meyer 1/8/04 DATE
SOIL CONSERVATION DISTRICT

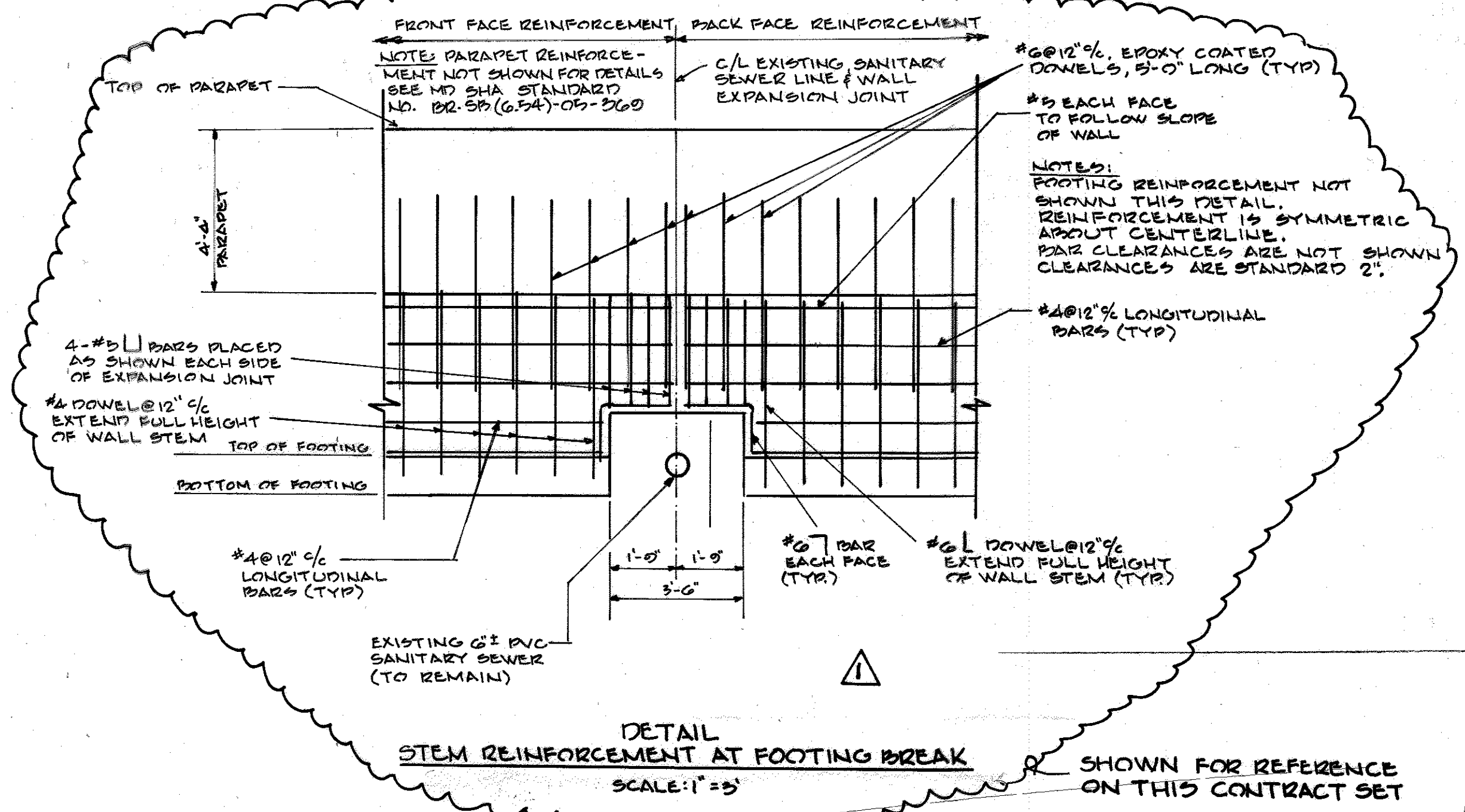
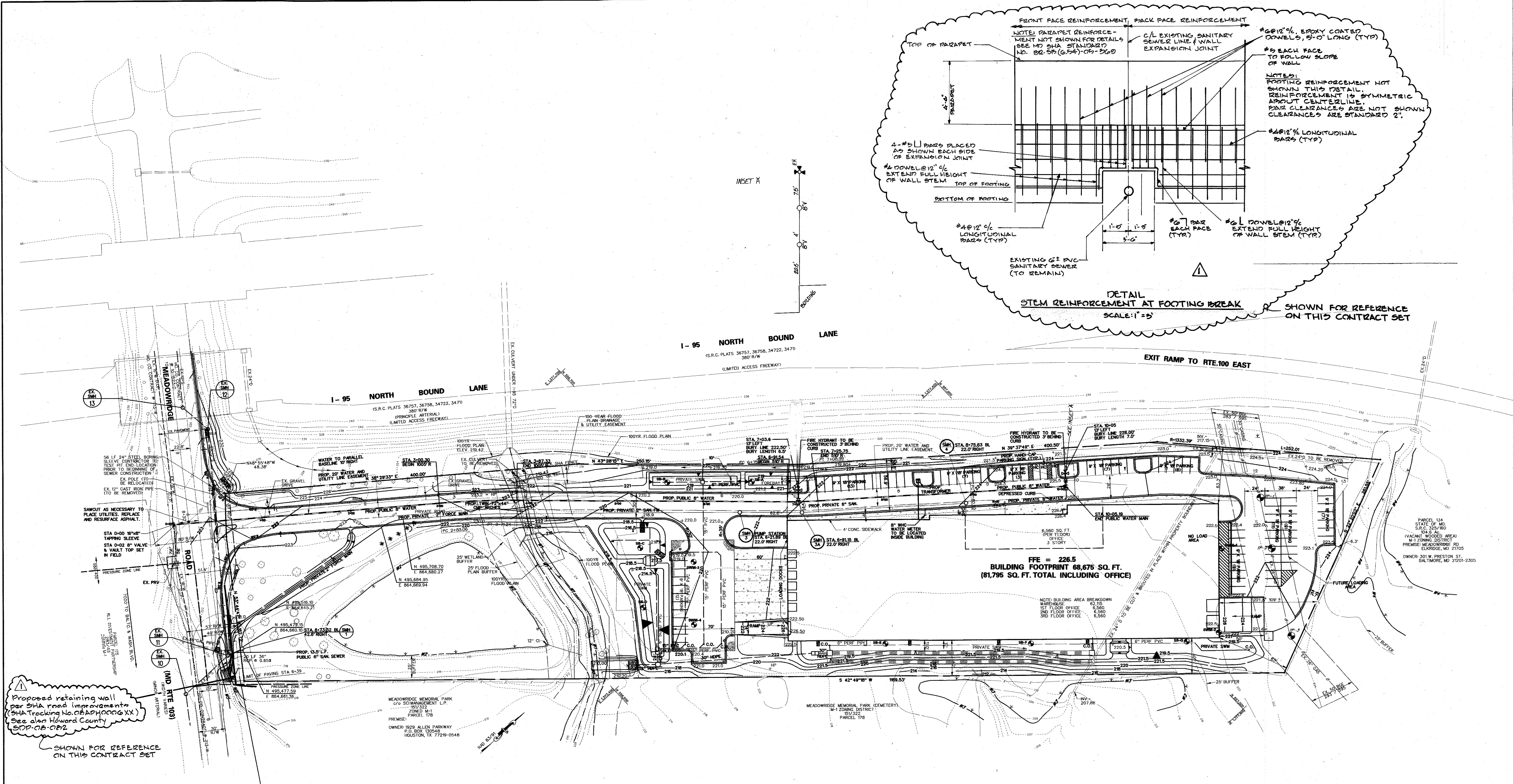
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 14102 Greenway Drive, Suite 424 Lanham, Maryland 20708 (301) 953-1821 (410) 792-8086 Fax: (410) 792-2439 www.kci.com	DESIGN BY: CGW DRAWN BY: AWW CHECKED BY: THM DATE: Dec. 22, 2003	TYPE OF BUILDING: OFFICE/WAREHOUSE NO. OF LOTS/PARCELS: 1 NO. OF WATER HOUSE CONNECTIONS: 1 NO. OF SEWER HOUSE CONNECTIONS: 1 DRAINAGE AREA: PATAPSCO TREATMENT PLANT: PATAPSCO	WATER & SEWER COUNTY CODE WATER CODE: D04 SEWER CODE: 2153000 TEST GRADIENT: 700	PURPOSE STATEMENT: The purpose of this Redline Revision #1 is to show a proposed retaining wall located within the SHA 2/W, that is to be constructed over the existing 6-inch sanitary sewer.
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**WATER AND SEWER
PLAN AND PROFILES**

**KANE COMPANIES, INC. HEADQUARTERS
CONTRACT NO. 14-4086-D**

SCALE
AS SHOWN
SHEET
1 OF 3

TAX MAP 37, GRID 16
1ST ELECTION DISTRICT
PARCEL 174
HOWARD COUNTY, MARYLAND



Proposed retaining wall per SHA road improvements (SHA Tracking No. 08ADPH0006 XX) See also Howard County SDD-08-082

SHOWN FOR REFERENCE ON THIS CONTRACT SET

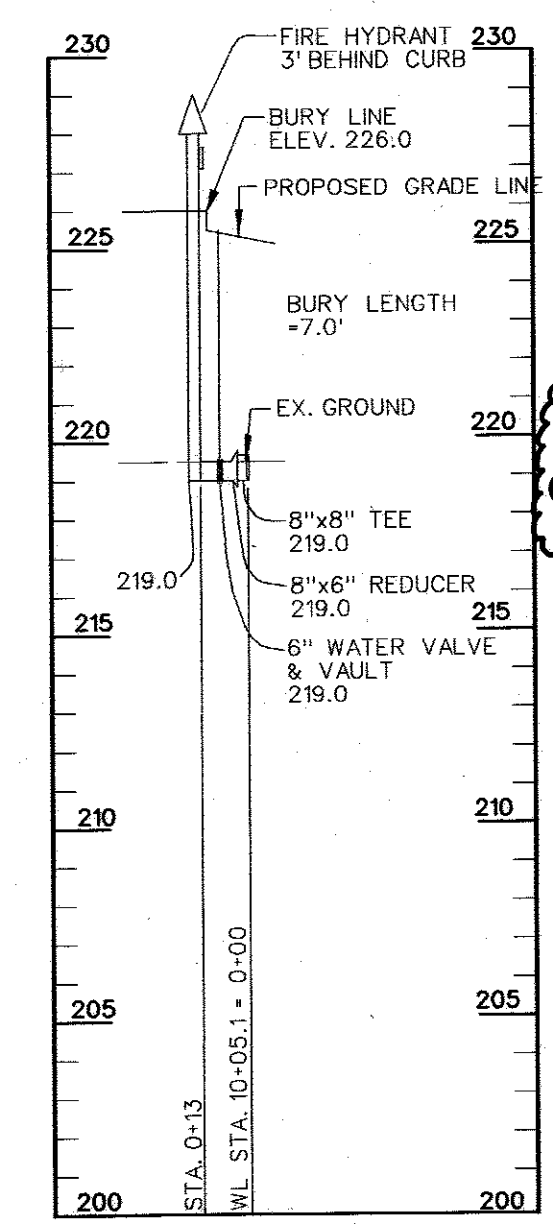
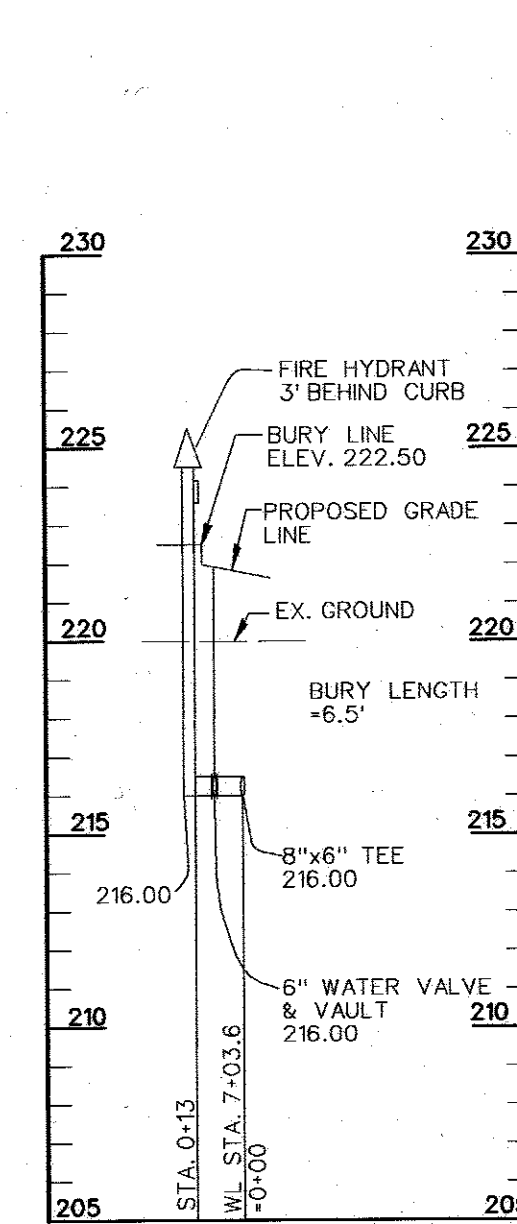
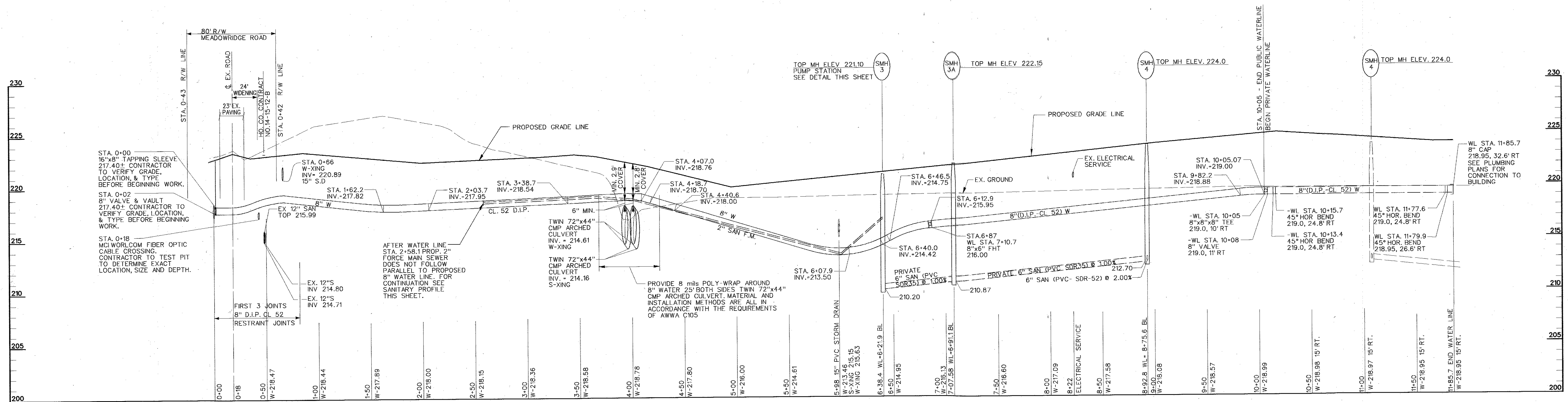
For redline revision #1 only.

11-21-16

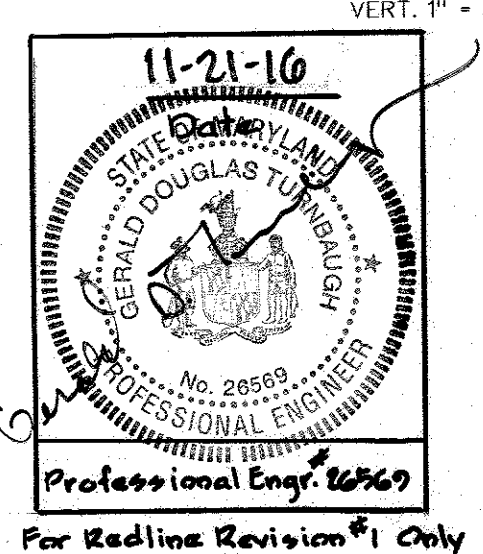
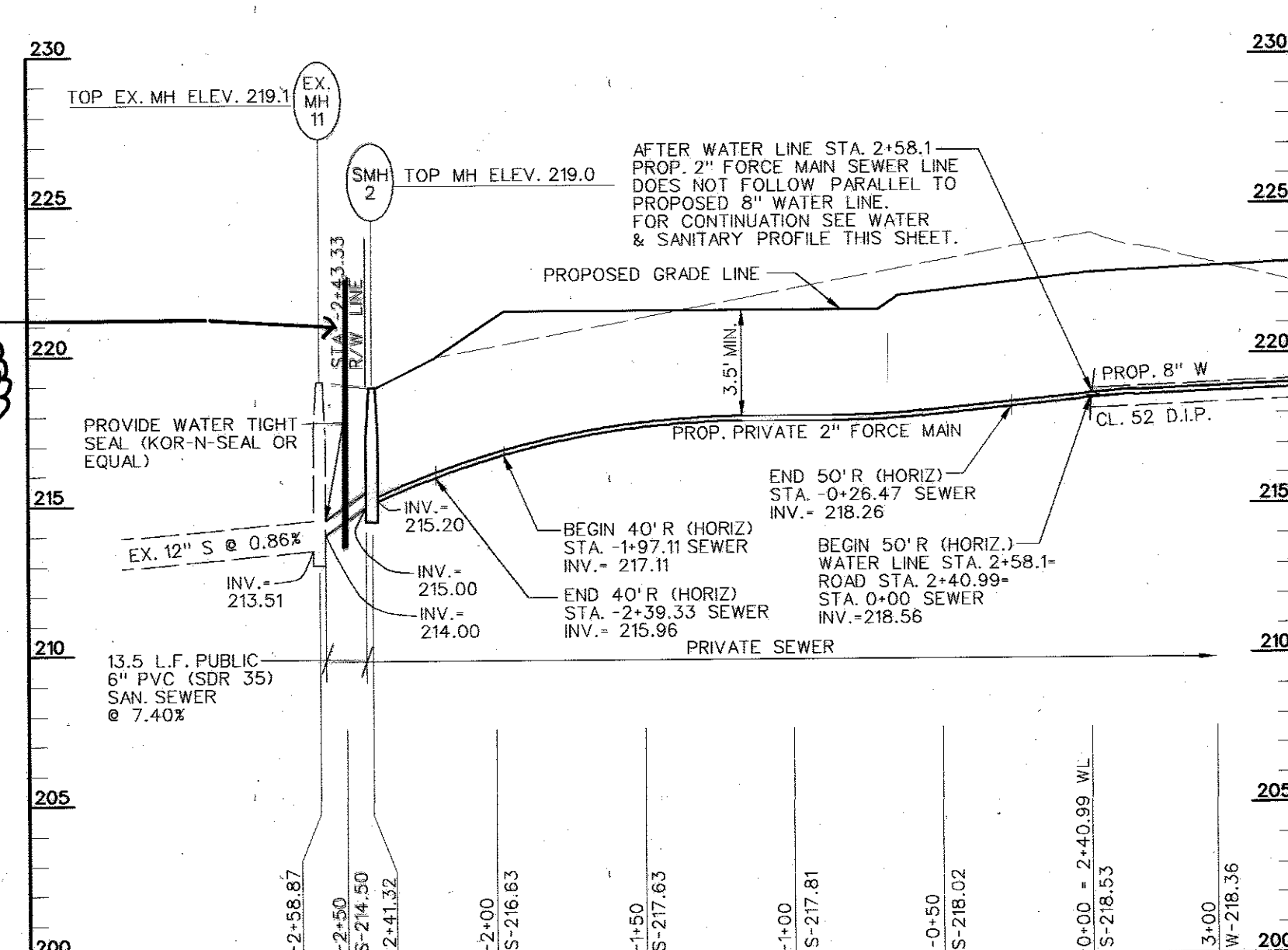
Professional Engr. # 26569

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 26569 Expiration Date: 7-18-17

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 14502 Greenview Drive, Suite 424 Laurel, Maryland 20788 (301) 953-1821 (410) 792-8086 Fax: (410) 792-7419 www.kci.com		DESIGN BY: CGW DRAWN BY: AWW CHECKED BY: THM DATE: Dec.22, 2003		DWN KCI AWW BY NO.		Show retaining wall over ex. sanitary 6-19-16 AS BUILT DATA 6/17/03 This set of plans supercedes the original plans dated Jan.6, 2003 for Contract No. 14-4086-D. 12/22/03		WATER & SEWER PLAN 600' SCALE NO. 37 BLOCK NO. 22		KANE COMPANIES, INC. HEADQUARTERS CONTRACT NO. 14-4086-D TAX MAP 37, GRID 16 1ST ELECTION DISTRICT		SCALE 1" = 50' SHEET 2 OF 3	
DATE: 12/20/13		DATE: 1/14/04		BUREAU OF UTILITIES		CHIEF - DEVELOPMENT ENGINEERING DIVISION		PARCEL 174 HOWARD COUNTY, MARYLAND									



Prop. Retaining Wall Per
 SHA Road Improvements
 (SHA Tracking No. 08APH0006XXX)
 SEE ALSO H.C. SDP-08-082
 Shown for reference
 on this contract set.



I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 26569 Expiration Date: 7-18-17

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 14302 Greencrest Drive, Suite 424 Lanham, Maryland 20788 (301) 923-8821 (410) 792-8086 Fax: (410) 792-7419 www.kci.com	 DESIGN BY: CGW DRAWN BY: AWW CHECKED BY: JHM DATE: Dec. 22, 2003	Show Prop. Retaining Wall - SHA AS BUILT DATA This set of plans supercedes the original plans dated Jan. 6, 2003 for Contract No. 14-4086-D. DATE: 12/22/03	WATER & SEWER PROFILES CONTRACT NO. 14-4086-D TAx MAP 37, GRID 16 1ST ELECTION DISTRICT	SCALE AS SHOWN SHEET 3 OF 3 PARCEL 174 HOWARD COUNTY, MARYLAND
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