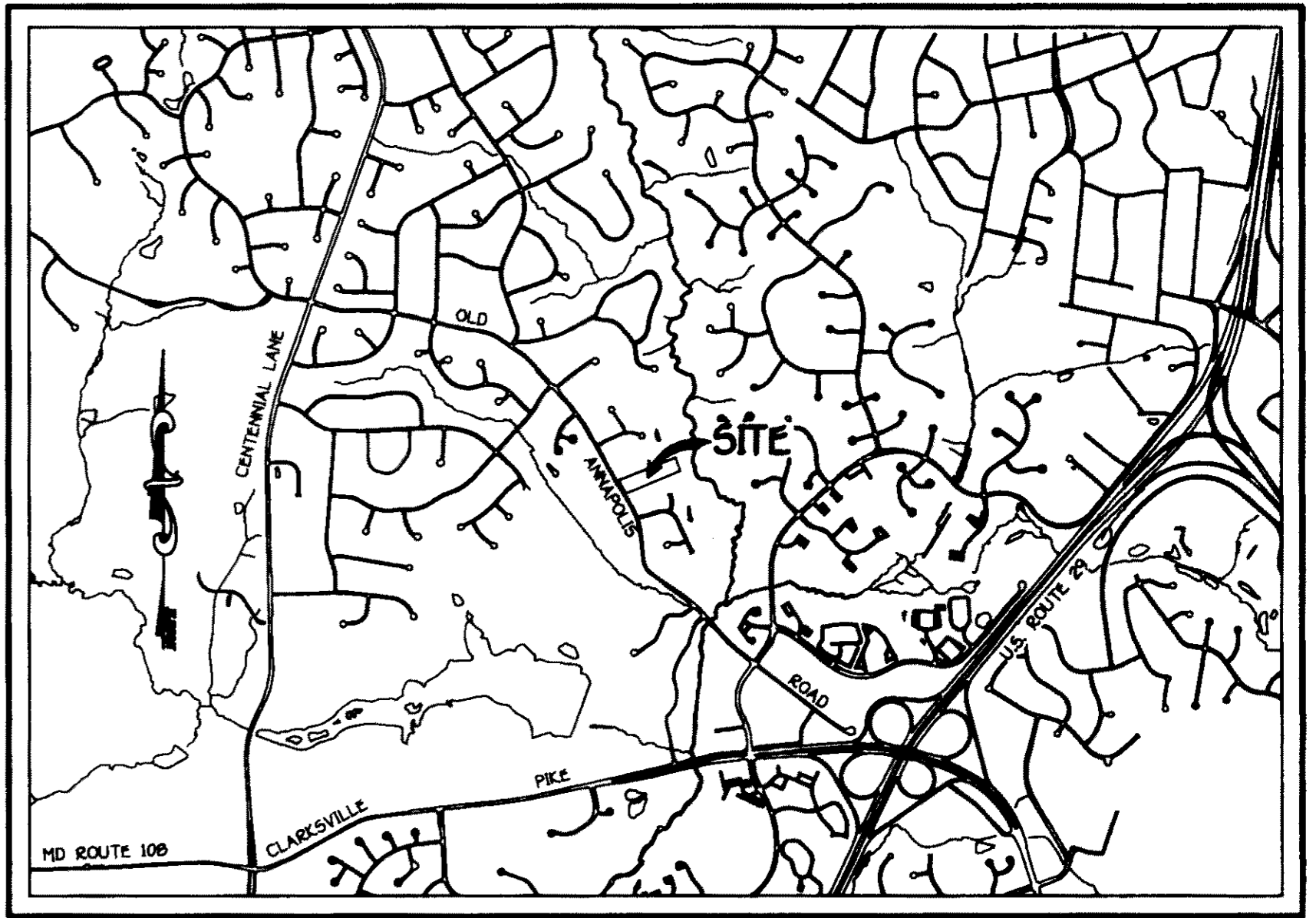
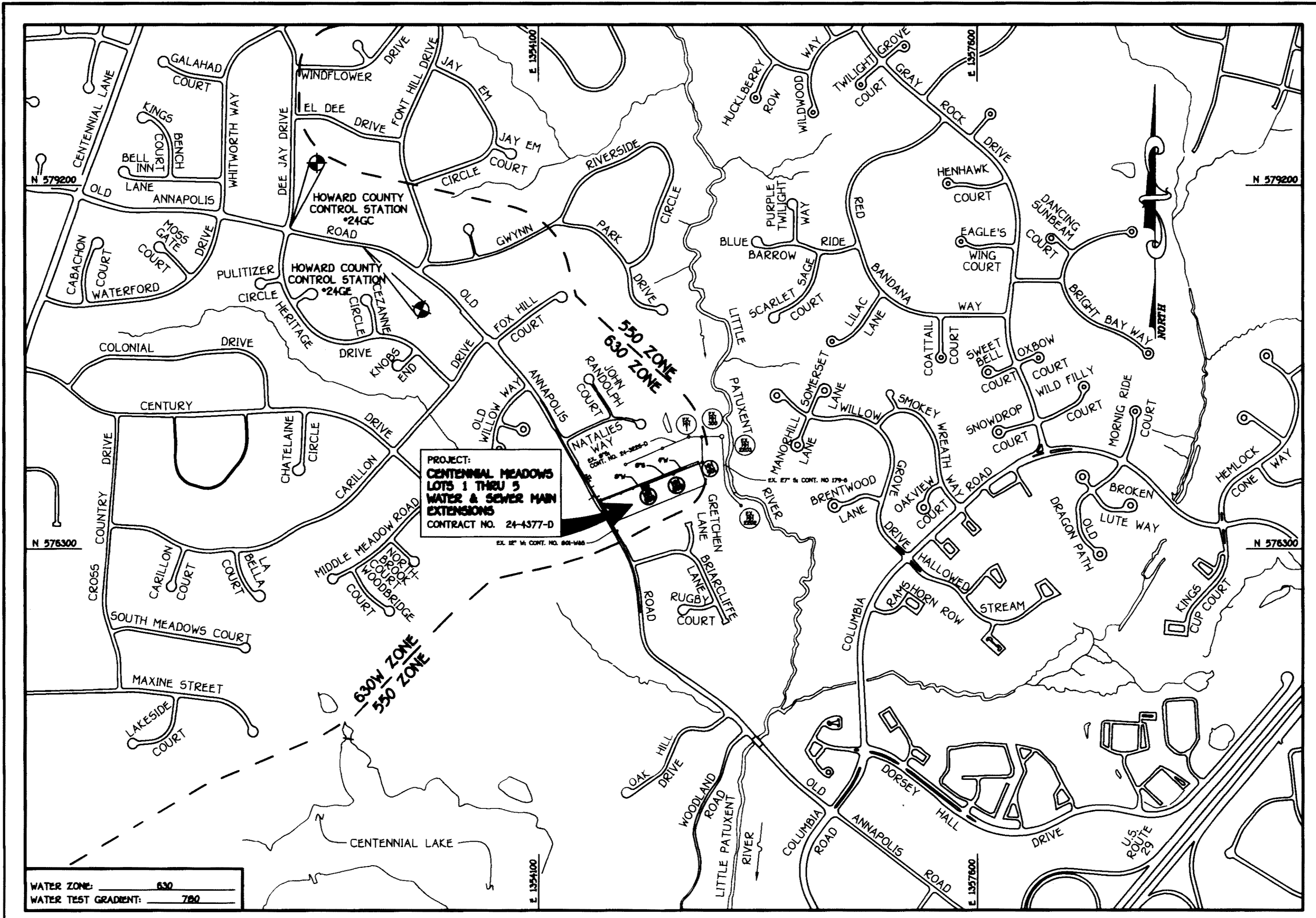


QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" SEWER	706 LF.	674	PVC	FERGUSON
4" SEWER	54 LF.	54	PVC	"
MANHOLES	5 EACH	5 EA	PRECAST	CONT. PRECAST
6" WATER	406 LF.	383	PVC C.900	FERGUSON
6" WATER	21 LF.	22	PVC C.900	"
4" WATER	328 LF.	363	PVC C.900	"
1" W.C.	90 LF.	80	1" K COPPER	"
1/2" TAPPING SLEEVE & VALVE	1 EACH	1 EA.	STAIN CR.S.S	"
6"X8" TEE	1 EACH	1 EA.	DIP	"
6"X4" REDUCER	1 EACH	1 EA.	DIP	"
6" VALVE	1 EACH	1 EA.	RSGV	"
6" VALVE	1 EACH	1 EA.	RSGV	"
1/2" H.S.	1 EACH	1 EA.	DIP	"
4" PLUG & BUTTRESS	1 EACH	1 EA.	DIP	"
FIRE HYDRANT	1 EACH	1 EA.	MUELLER	"
1/2" OREAN & WALT	1 EACH	1 EA.	MUELLER	"

NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED
SURVEY & DRAFTING DIVISION AS-BUILT DATE:



PRIVATE WELL & PRIVATE SEPTIC SYSTEM CHART				
PARCEL NO.	ADDRESS	OWNER	ABANDON WELL	ABANDON SEPTIC
11E	1700 OLD ANNAPOLIS ROAD	LOWELL & CHRISTIANA KAU	YES	YES

NOTE: WATER METERS WILL NOT BE RELEASED BY HOWARD COUNTY TO ANY NEW BUILDING UNTIL THE EXISTING WELL AND SEPTIC SYSTEMS HAVE BEEN ABANDONED IN ACCORDANCE WITH HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS AND THE EXISTING HOUSE IS CONNECTED TO THE PUBLIC WATER AND SEWER SYSTEMS.

TYPE OF BUILDING:	RESIDENTIAL SINGLE FAMILY DETACHED
NUMBER OF LOTS:	5
NO. OF WATER HOUSE CONNECTIONS:	5
NO. OF SEWER HOUSE CONNECTIONS:	5
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE MD

VICINITY MAP
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:	
SP-07-005	F-09-018
SDP 09-100	

CONTRACT NO. 24-4377-D

CENTENNIAL MEADOWS

LOTS 1 THRU 5

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEVELOPER'S CERTIFICATION
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Paul W. Keibel, FOR:
CORNERSTONE HOLDINGS, LLC
04-15-09
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Paul W. Keibel, FOR:
CORNERSTONE HOLDINGS, LLC
04-15-09
SIGNATURE OF DEVELOPER DATE

GP-07-054

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

APPROVED:
John K. Klotter 5/13/09
HOWARD SOIL CONSERVATION DISTRICT DATE

- GENERAL NOTES**
SCALE: 1" = 2000'
- PART A
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES FROM UNNECESSARY DAMAGE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT JULY, 2005 BY SHANABERGER & LANE, INC.
 - THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM HAD '83/89' AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION NO. 246C & NO. 246E.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD '83. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES CLEAR ALL POLES BY 3'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL @ AT THE LOCATIONS OF THE TEST PITS. 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 MADE SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - AT&T 1-800-252-1133
 - ACE (CONSTRUCTION SERVICES) 410-650-4820
 - ACE (EMERGENCY) 410-665-4400
 - BUREAU OF UTILITIES 410-315-4900
 - COLONIAL PIPELINE CO 410-795-1390
 - PIES UTILITY 1-800-257-7777
 - STATE HIGHWAY ADMINISTRATION 410-331-9533
 - VERIZON 1-800-743-0033/410-224-9210
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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 THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-315-7490 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 16.01(A) OF THE HOWARD COUNTY CODE.

- PART B: WATER MAIN GENERAL NOTES
- ALL WATER MAINS SHALL BE ANVNA, 6000 P.C. PIPE.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. THE SOLE AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 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 THE PLANS OR IN THE SPECIFICATIONS.
 - FOR SPRINKLER SYSTEM FOR ALL TOWN HOMES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1' CONNECTION WITH A 3/4" METER.

- PART C: SEWER MAIN GENERAL NOTES
- 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.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATER-TIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - HOUSES WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

BENCHMARK INFORMATION

B.M.-1 - HOWARD COUNTY CONTROL STATION #246C (HAD '83)
APPROX. 37.0' FROM THE CENTER OF OLD ANNAPOLIS ROAD AND DEE JAY DRIVE ON THE NORTH EAST CORNER
N 578,968.824
E 1,592,180.696
ELEVATION = 439.5785

B.M.-2 - HOWARD COUNTY CONTROL STATION # 246E (HAD '83)
LOCATED ALONG THE SOUTH WEST SIDE OF OLD ANNAPOLIS ROAD, APPROX. 15' OFF THE EDGE OF PAVING IN FRONT OF HOUSE #9217
N 578,708.907
E 1,592,699.713
ELEVATION = 446.636

DEVELOPER
CORNERSTONE HOLDINGS, LLC
8905 MIDDLEBURY ROAD
LAUREL, MARYLAND 20723
ATTN: MR. BRIAN BOY
410-792-2595

CONTRACT NO. 24-4377-D
CENTENNIAL MEADOWS
LOTS 1 THRU 5
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND S. C. LEE CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND M. J. DUNN CHIEF, DEVELOPMENT ENGINEERING DIVISION		DESIGNED BY: B.C.E. DRAWN BY: B.C.E. CHECKED BY: P.W.K. DATE: APRIL, 2009	WATER AND SEWER MAINS TITLE SHEET 800' SCALE MAP NO. 30 BLOCK NO. 3 T.C.C. WORK ORDER NO. 0282 FILE NAME: WATER AND SEWER MAIN EXTENSION TITLE SHEET	CENTENNIAL MEADOWS LOTS 1 THRU 5 CONTRACT NO. 24-4377-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 1 OF 3
--	---	--	--	--	---

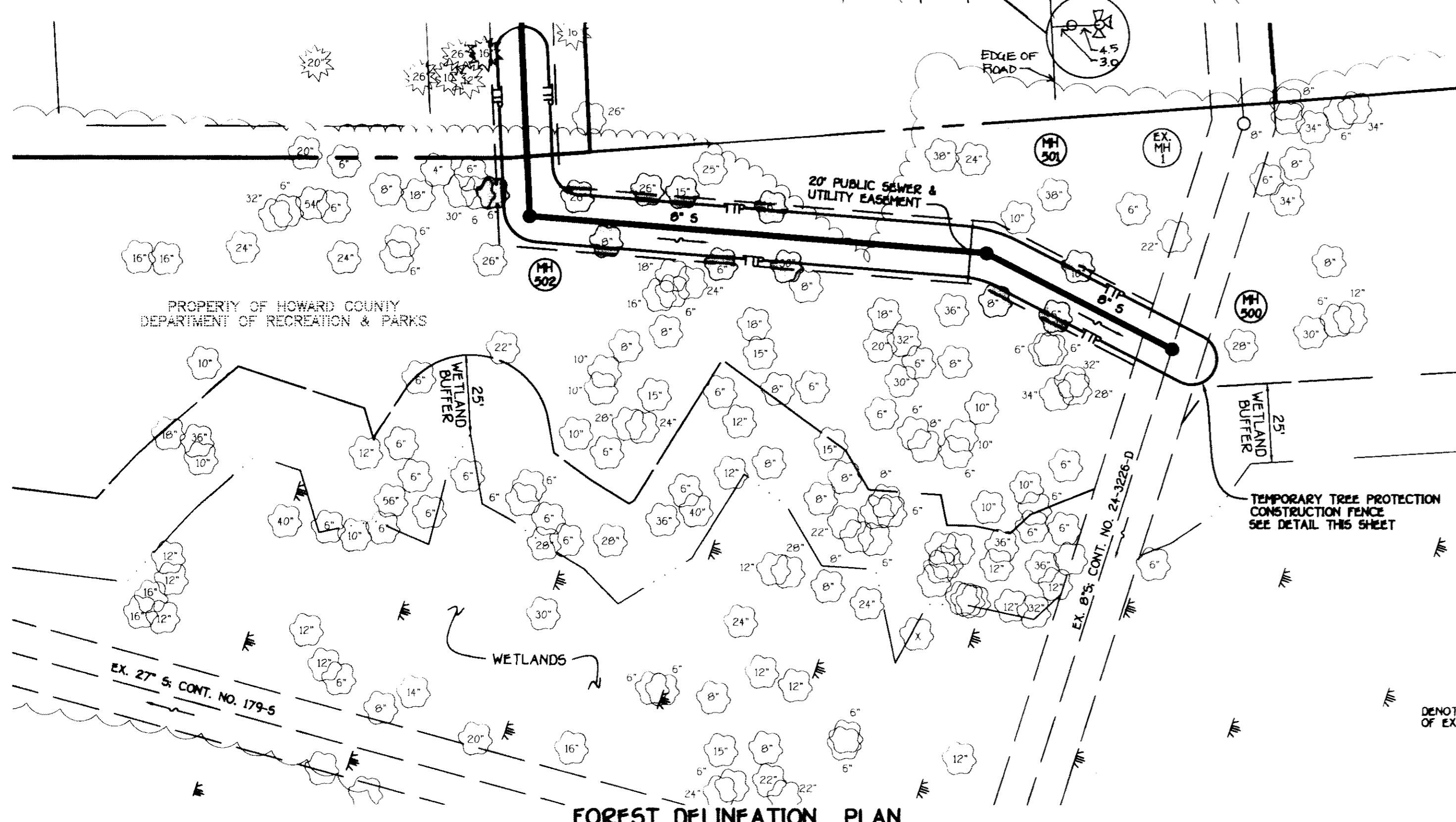
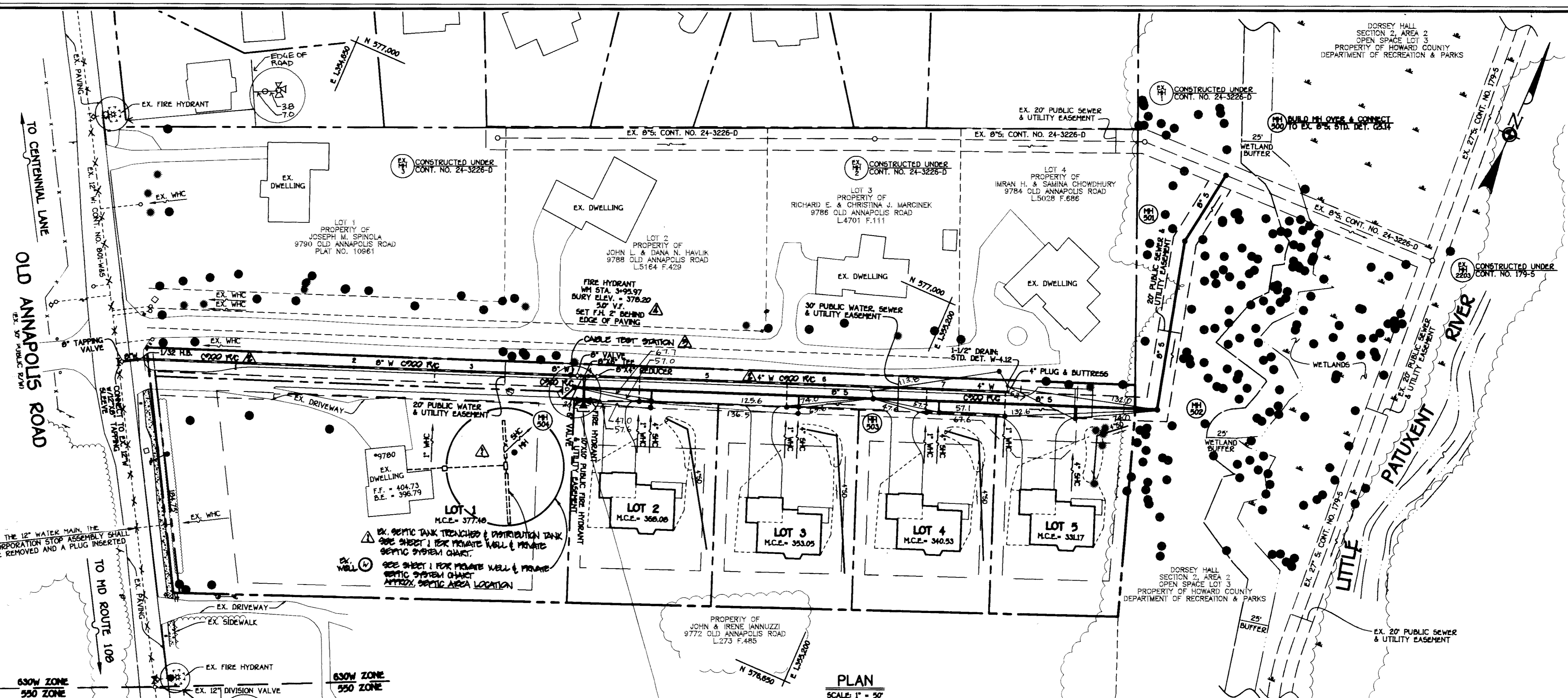
I:\2009\03\28\0328 WMS BASE PLAN.dwg, 4/15/2009 11:16:32 AM, BROWDER

OLD ANNAPOLIS ROAD

R/W	6.07'	LOT 5
	6.07'	LOT 4
	6.07'	LOT 3
	6.07'	LOT 2

R/W

ENLARGEMENT:
FRONT FOOTAGES; LOTS 2 THRU 5
SCALE: 1" = 30'

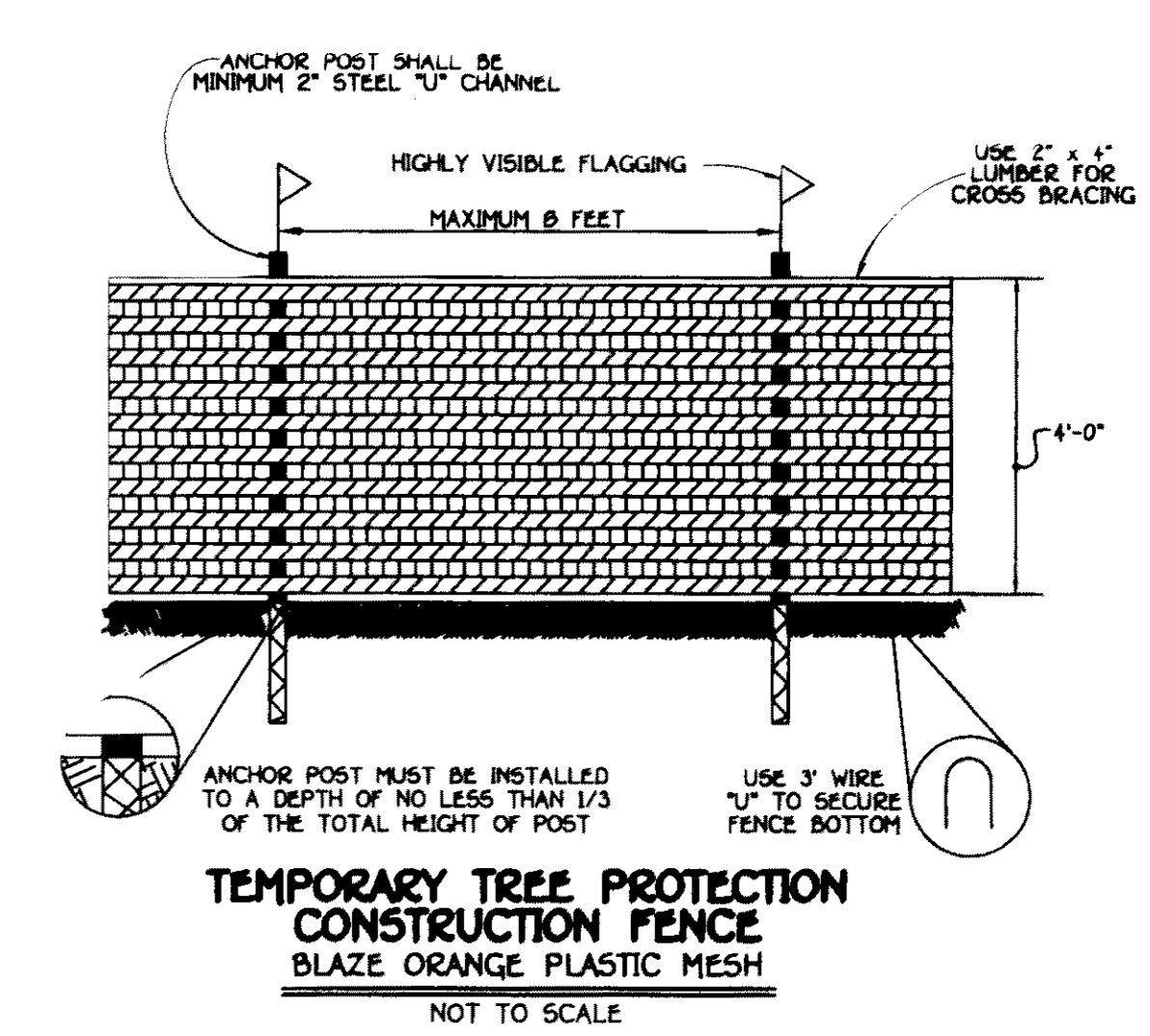


NOTICE: 1. SEE ENLARGEMENT THIS SHEET FOR FRONT FOOTAGES; LOTS 2 THRU 5
2. SEE THIS SHEET FOR FOREST DELINEATION PLAN

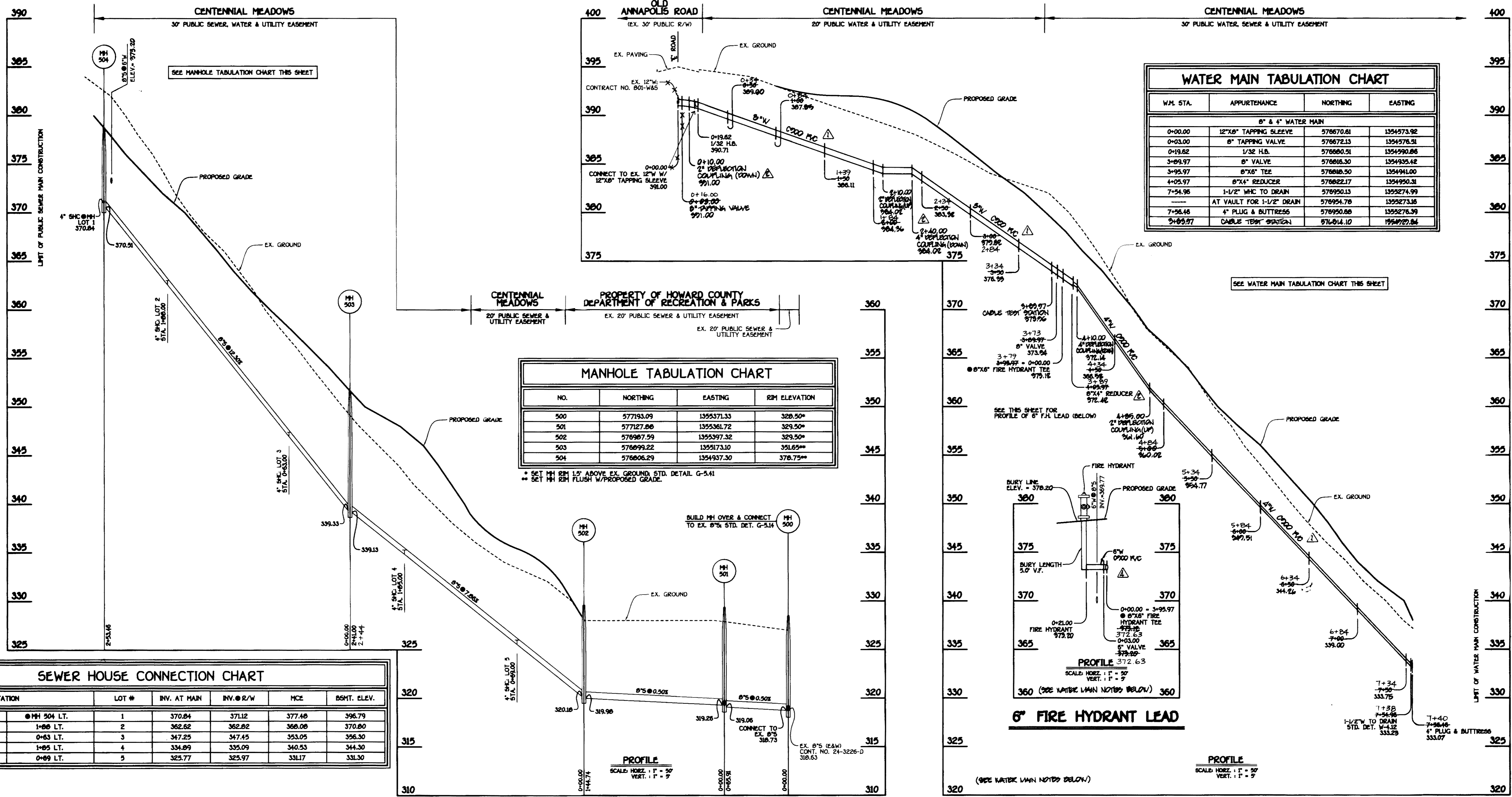
LEGEND

SYMBOL	DESCRIPTION
(Symbol: Circle with 'E')	EXISTING EVERGREEN TREE
(Symbol: Circle with 'D')	EXISTING DECIDUOUS TREE

Ø DENOTES DIAMETER OF EXISTING TREE.



<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p>5/14/09</p> <p>DATE</p>	<p>DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND</p> <p>5/14/09</p> <p>DATE</p>	<p>DESIGNED BY: B.C.R.</p> <p>DRAWN BY: B.C.R.</p> <p>CHECKED BY: P.W.K.</p> <p>DATE: APRIL, 2009</p>	<p>AS-BUILT REVISIONS</p> <table border="1"> <tr><td>KCL</td><td>5</td><td>AS-BUILT REVISIONS</td><td>10/29/08</td></tr> <tr><td>PCG</td><td>1</td><td>REMOVE FIRE HYDRANT BURY LINE BELOW & BURY WELLSHED (N)</td><td>6/14/10</td></tr> <tr><td>PCG</td><td>2</td><td>PERFORM INSTALLATION OF A CABLE TEST STATION ON THE WATER MAIN</td><td>6/14/10</td></tr> <tr><td>PCG</td><td>3</td><td>PERFORM C900 R/C PIPE INSTALLATION FOR THE WATER MAIN</td><td>6/14/10</td></tr> <tr><td>PCG</td><td>4</td><td>INDICATE & PROVIDE EX. PRIVATE SEPTIC SYSTEM FACILITIES</td><td>6/14/10</td></tr> </table>	KCL	5	AS-BUILT REVISIONS	10/29/08	PCG	1	REMOVE FIRE HYDRANT BURY LINE BELOW & BURY WELLSHED (N)	6/14/10	PCG	2	PERFORM INSTALLATION OF A CABLE TEST STATION ON THE WATER MAIN	6/14/10	PCG	3	PERFORM C900 R/C PIPE INSTALLATION FOR THE WATER MAIN	6/14/10	PCG	4	INDICATE & PROVIDE EX. PRIVATE SEPTIC SYSTEM FACILITIES	6/14/10	<p>WATER AND SEWER MAINS PLAN FOREST DELINEATION PLAN</p> <p>600' SCALE MAP NO. 30 BLOCK NO. 3 F.C.C. WORK ORDER NO. 02829</p>	<p>CENTENNIAL MEADOWS LOTS 1 THRU 5 CONTRACT NO. 24-4377-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p> <p>SCALE AS SHOWN SHEET 2 of 3</p>
KCL	5	AS-BUILT REVISIONS	10/29/08																						
PCG	1	REMOVE FIRE HYDRANT BURY LINE BELOW & BURY WELLSHED (N)	6/14/10																						
PCG	2	PERFORM INSTALLATION OF A CABLE TEST STATION ON THE WATER MAIN	6/14/10																						
PCG	3	PERFORM C900 R/C PIPE INSTALLATION FOR THE WATER MAIN	6/14/10																						
PCG	4	INDICATE & PROVIDE EX. PRIVATE SEPTIC SYSTEM FACILITIES	6/14/10																						



WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" & 4" WATER MAIN			
0+00.00	12"x8" TAPPING SLEEVE	576670.61	1354573.92
0+03.00	8" TAPPING VALVE	576672.13	1354576.31
0+19.62	1/32 H.B.	576680.31	1354590.86
3+09.97	8" VALVE	576616.30	1354935.42
3+99.97	8"x6" TEE	576616.50	1354941.00
4+09.97	8"x4" REDUCER	576622.17	1354950.31
7+54.96	1-1/2" W/C TO DRAIN	576950.13	1359274.99
---	AT VAULT FOR 1-1/2" DRAIN	576954.78	1359273.16
7+56.46	4" PLUG & BUTTRESS	576950.86	1359276.39
9+09.97	CABLE TEST STATION	576614.10	1354929.84

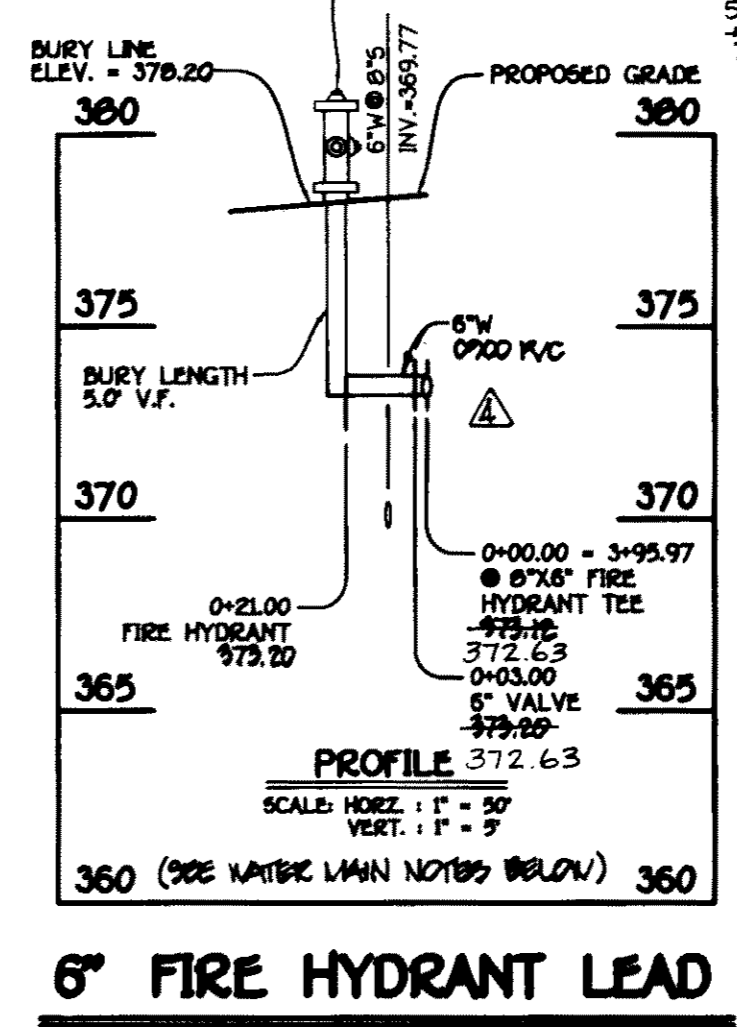
MANHOLE TABULATION CHART

NO.	NORTHING	EASTING	RIM ELEVATION
500	577193.09	1355371.33	328.50*
501	577127.86	1355361.72	329.50*
502	576967.99	1355397.32	329.50*
503	576899.22	1355173.10	351.65**
504	576806.29	1354937.30	378.75**

* SET MH RIM 12" ABOVE EX. GROUND, STD. DETAIL G-541
 ** SET MH RIM FLUSH W/PROPOSED GRADE.

SEWER HOUSE CONNECTION CHART

STATION	LOT #	INV. AT MAIN	INV. @ R/W	MCE	BSHT. ELEV.
MH 503 TO MH 504	1	370.84	371.12	377.46	396.79
MH 503 TO MH 504	2	362.62	362.82	368.08	370.80
MH 503 TO MH 504	3	347.25	347.45	353.05	356.30
MH 502 TO MH 503	4	334.89	335.09	340.53	344.30
MH 502 TO MH 503	5	325.77	325.97	331.17	331.30



8" SEWER MAIN; LOTS 1 THRU 5

8" & 4" WATER MAINS; LOTS 1 THRU 5

- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE ANNA ODD PVC PIPE.
 - ALL PIPE DEGRADATION, TRACERS, WIRE, LOCATION TAPES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME 32 - WATER AND SEWER STANDARDS FOR ANNA ODD PVC WATER PIPE INSTALLATION.
 - REFLECTION COUPLINGS SHALL BE CERTAIN-TITE PVC HIGH REFLECTION COUPLINGS.
 - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SPUDLE.

CONTRACT NO. 24-4377-D
 CENTENNIAL MEADOWS
 LOTS 1 THRU 5
 WATER AND SEWER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division		DESIGNED BY: B.C.E. DRAWN BY: B.C.E. CHECKED BY: P.W.E. DATE: APRIL, 2009	ECI 5 AS-BUILT REVISIONS PCC 5 REMOVE PROFILE OF 6" FIRE HYDRANT LEAD PCC 6 ADD WATER MAIN NOTES TO ACCOMMODATE ODD PVC PIPE INSTALLATION PCC 7 REMOVE WATER MAIN PROFILE TO ACCOMMODATE ODD PVC PIPE INSTALLATION PCC 8 REMOVE ODD PVC PIPE INSTALLATION FOR THE WATER MAIN	WATER AND SEWER MAINS PROFILES AND CHARTS 600' SCALE MAP NO. 30 BLOCK NO. 3 F.C.C. WORK ORDER NO. 0282 FILE NAME: WATER AND SEWER MAIN EXTENSION PROFILE SHEET	CENTENNIAL MEADOWS LOTS 1 THRU 5 CONTRACT NO. 24-4377-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 3
---	---	--	--	--	--	---	--------------------------------

I:\D005165128\HWG165128.WAS BASE PLAN.dwg, 4/15/2009 11:12:38 AM, Brandon