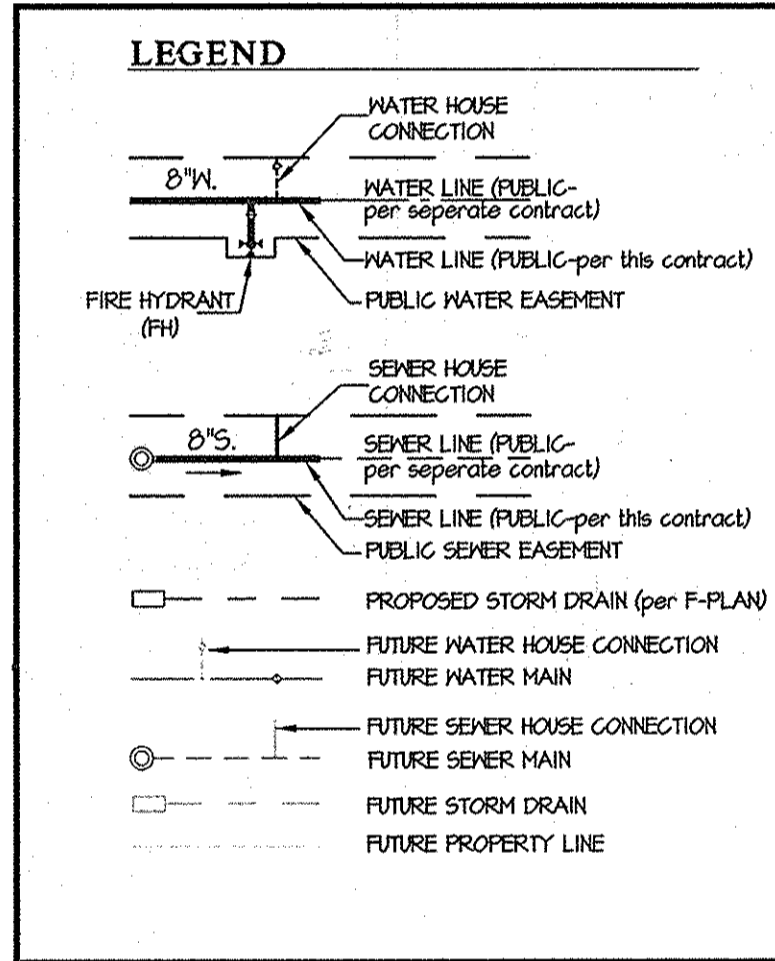


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" D.I.P. WATER MAIN	12.21 L.F.	10.21 L.F.	CL 54	GRIFFIN PIPE
6" D.I.P. WATER MAIN	63 L.F.	63 L.F.	CL 54	GRIFFIN PIPE
1/2" COPPER WHC	187 L.F.	187 L.F.	B-88	HOWELL METAL
12"x8" T.S. & V.	1 EA.	1 EA.		FORD METERBOX/KENNEDY
12"x8" REDUCER	1 EA.	1 EA.	MJ	STAR PIPE PRODUCTS
8" V8 HB	2 EA.	2 EA.	MJ	STAR PIPE PRODUCTS
8"x6" FHT	3 EA.	3 EA.	MJ	STAR PIPE PRODUCTS
12"x6" FHT	2 EA.	2 EA.	MJ	STAR PIPE PRODUCTS
FIRE HYDRANTS	5 EA.	5 EA.	C 502	KENNEDY
8" PVC SEWER MAIN	2125 L.F.	2125 L.F.	SDR 35	NORTH AMERICAN PIPE
4" PVC SHC	3031 L.F.	3030 L.F.	SDR 35	NORTH AMERICAN PIPE
SEWER MANHOLES	12 EA.	12 EA.	PRE-CAST	CONTRACTOR'S PRECAST
6" VALVE	3 EA.	3 EA.	GATE VALVE	KENNEDY
6" VALVE	2 EA.	2 EA.	TAPPING VALVE	KENNEDY

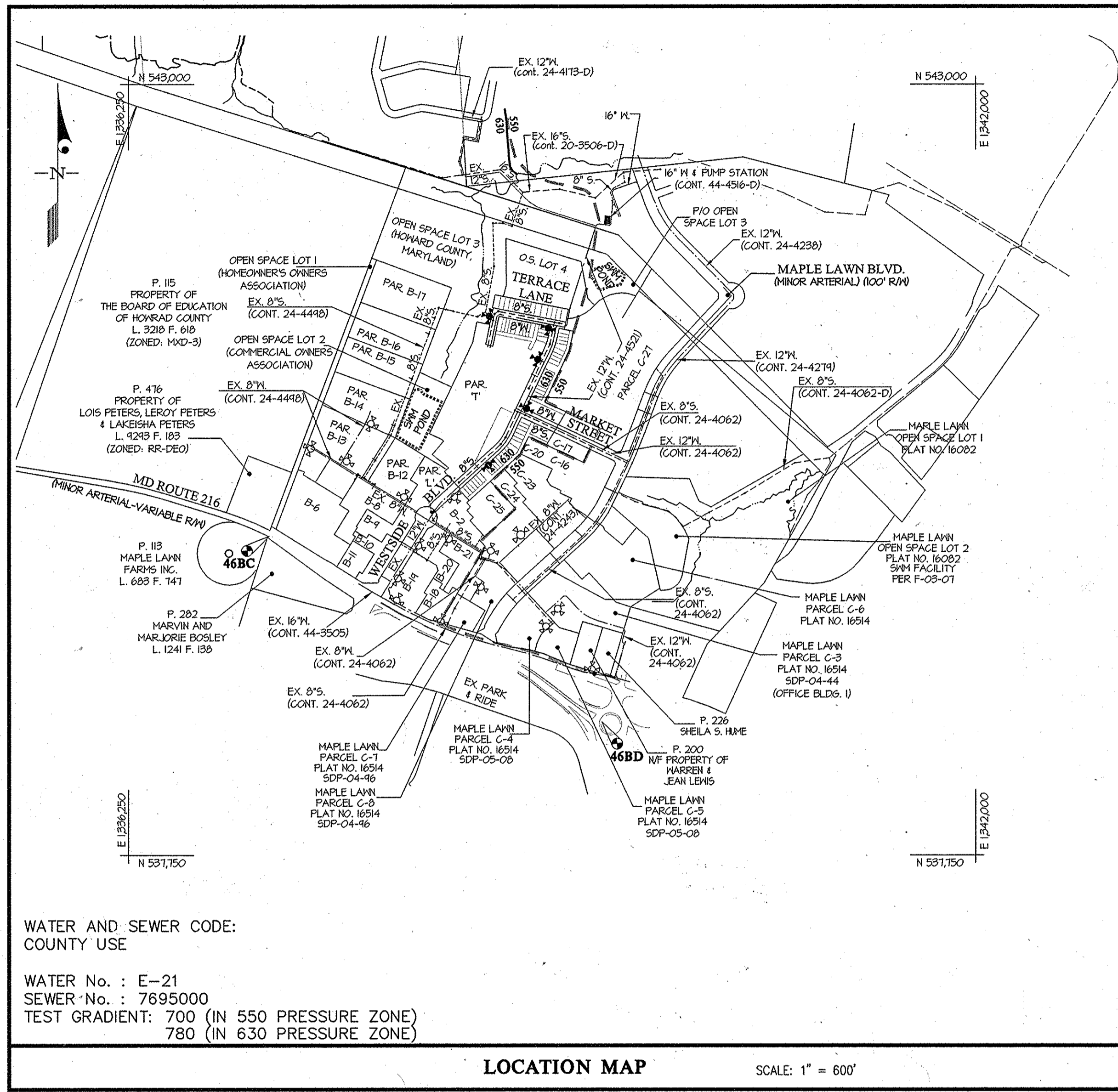
NAME OF UTILITY CONTRACTOR: GAINES & CO.

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE: 2-26-15

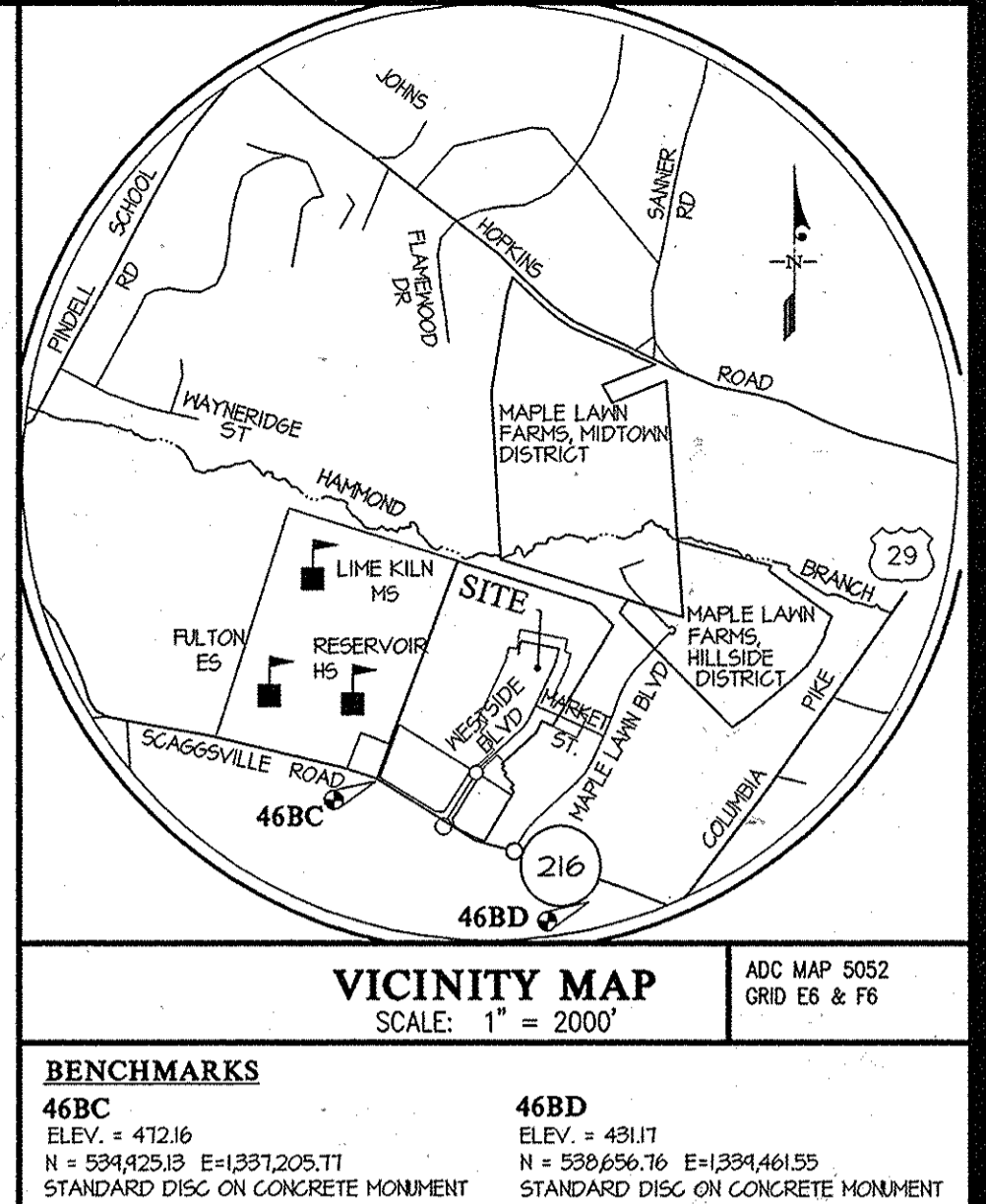


SHEET INDEX

1 - WATER & SEWER TITLE SHEET
2 - WATER & SEWER PLAN
3 - WATER & SEWER PROFILES
4 - WATER & SEWER PROFILES



TYPE OF BUILDING	RESIDENTIAL
NUMBER OF UNITS	67
NUMBER OF S.H.C.'s	47 45 SINGLE SHC'S 2 TWIN SHC'S
NUMBER OF W.H.C.'s	6 41 SINGLE WHC'S 2 TWIN WHC'S
SEWER SHED	LITTLE PATUXENT
PUMPING STATION	NA



GENERAL NOTES

PART I

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED DURING MARCH 1991 BY SDI.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS: THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/81 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 46BC AND NO. 41EA. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE STANDARD DISCS ON CONCRETE MONUMENTS.
- 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 5'-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 THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF 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.
- 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 DUG 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
BGE (CONSTRUCTION SERVICES)	410-637-8113
BGE (EMERGENCY)	410-685-0123
BUREAU OF UTILITIES	410-315-4400
COLONIAL PIPELINE CO.	410-785-8940
MISS UTILITY	1-800-257-TTTT
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033 / 410-224-4210
- 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.
- THE 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 CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 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 DPM REQUIREMENTS PER SECTION 18.11(A) OF THE HOWARD COUNTY CODE.

PART II WATER

- ALL WATER MAINS SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
- 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 INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL 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.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.

PART III

- 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 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED M.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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 THE CELLAR CANNOT BE SERVED.

CONTRACT No. 24-4701-D
 MAPLE LAWN FARMS
 WESTSIDE DISTRICT - AREA 2
 LOTS 1 thru 67, OPEN SPACE LOT 68
 COMMON OPEN AREA LOTS 69 thru 71
 and NON-BUILDABLE BULK PARCELS 'P' thru 'T'
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AT FINAL ROAD PLAN STAGE F-12-21.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

SIGNATURE: [Signature] DATE: [Date]

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

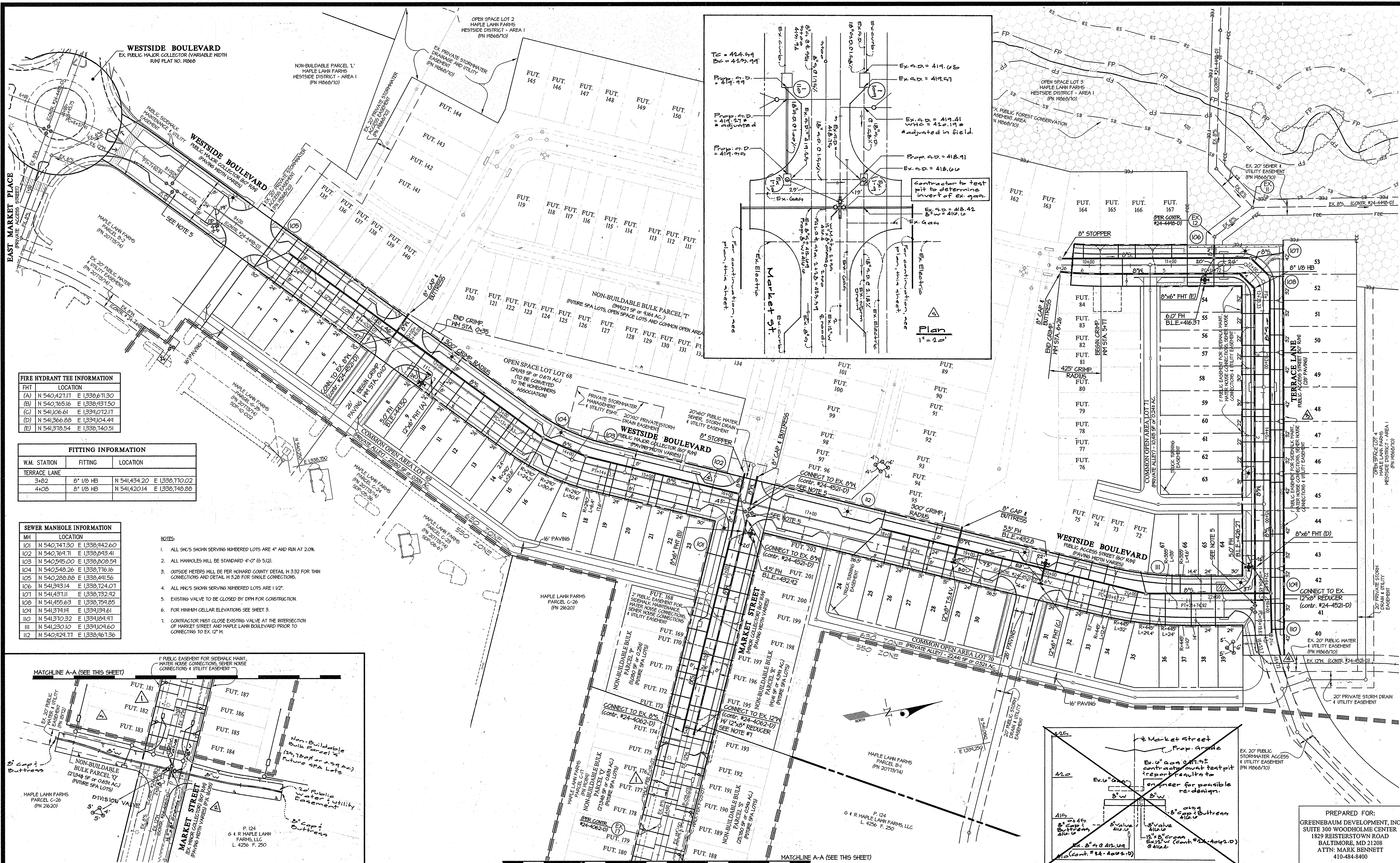
APPROVED: [Signature] DATE: 1/25/12

HOWARD S.C.D.

PREPARED FOR:
 GREENBAUM DEVELOPMENT, INC
 SUITE 300 WOODHOLME CENTER
 1829 REISTERSTOWN ROAD
 BALTIMORE, MD 21208
 ATTN: MARK BENNETT
 410-484-8400

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] DATE: 1/25/12 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND [Signature] DATE: 1/25/12 CHIEF, DEVELOPMENT ENGINEERING DIVISION	GLW GUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20886 TEL: 301-421-4024 BALT: 410-380-1820 DC/VA: 301-383-2524 FAX: 301-421-4186	DATE: JAN., 2012 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE PLANS 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. 12375, EXP. DATE: MAY 26, 2012	REVISIONS: REV 1: Revised quantities to reflect addition REV 2: Revised quantities to reflect b/w extension DATE: 04.25.12 DATE: 01.07.15	WATER and SEWER TITLE SHEET 600' SCALE MAP NO. 46 BLOCK NO. 4	MAPLE LAWN FARMS CONTRACT No. 24-4701-D WESTSIDE DISTRICT - AREA 2 LOTS 1 THRU 67, OPEN SPACE LOT 68 COMMON OPEN AREA LOTS 69 THRU 71 AND NON-BUILDABLE BULK PARCELS 'P' thru 'T' HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 5	SCALE: AS SHOWN SHEET: 1 OF 4
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L:\CADD\DRAWINGS\03067\0001\NS\FINAL\1001-FIN-CS.dwg DES. DEV DRN. KLP CHK. DEV 10001
 L:\CADD\DRAWINGS\03067\0001\NS\FINAL\1001-FIN-CS.dwg DES. DEV DRN. KLP CHK. DEV 10001
 PLOTTED: 1/27/2012 2:12 PM LAST SAVED: 12/20/12 7:13 AM PLOTTED BY: Doug Vande Ruyk



FIRE HYDRANT TEE INFORMATION

FHT	LOCATION
(A)	N 540,427.17 E 1,338,671.30
(B)	N 540,165.16 E 1,338,437.50
(C)	N 541,066.61 E 1,334,072.11
(D)	N 541,366.88 E 1,334,104.44
(E)	N 541,378.54 E 1,338,140.51

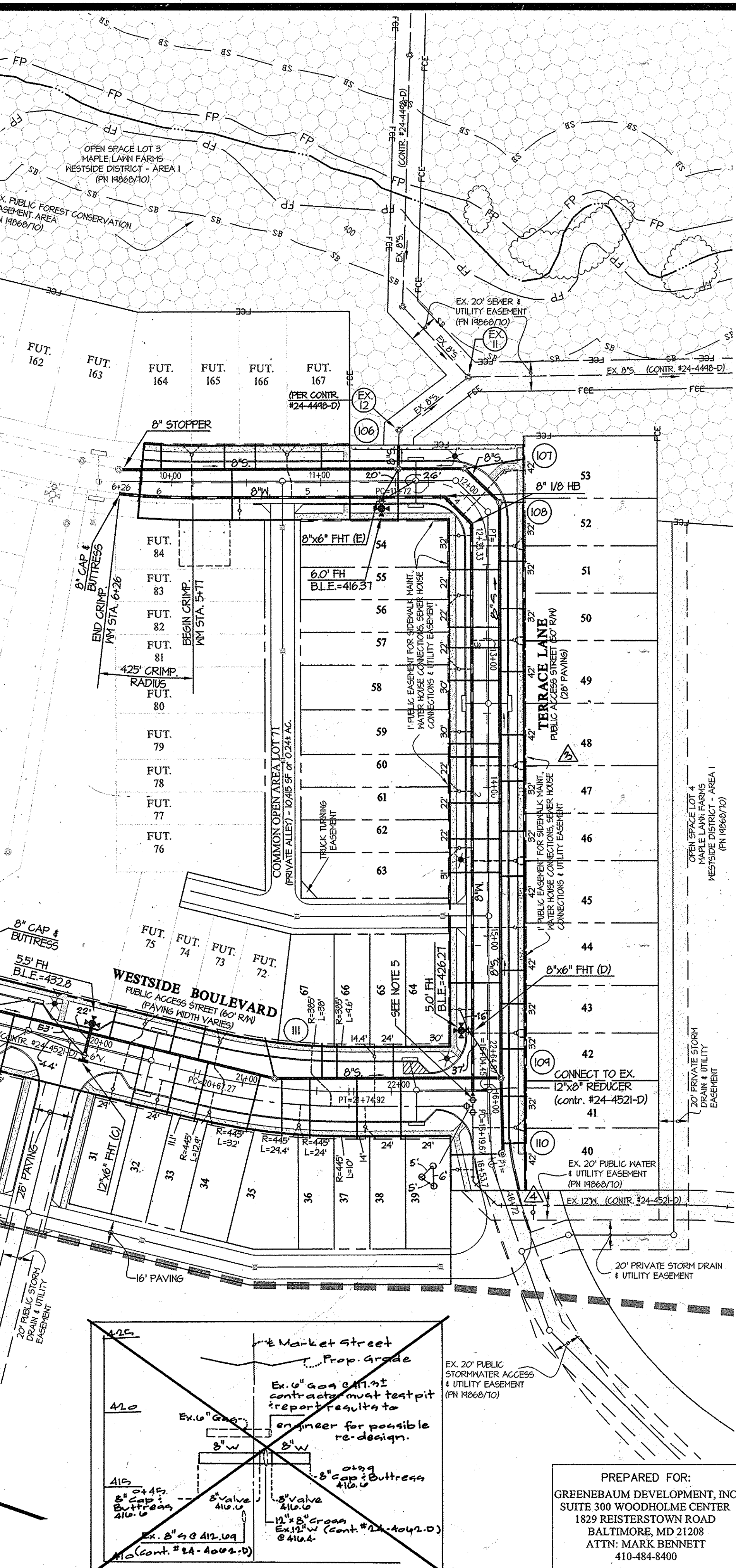
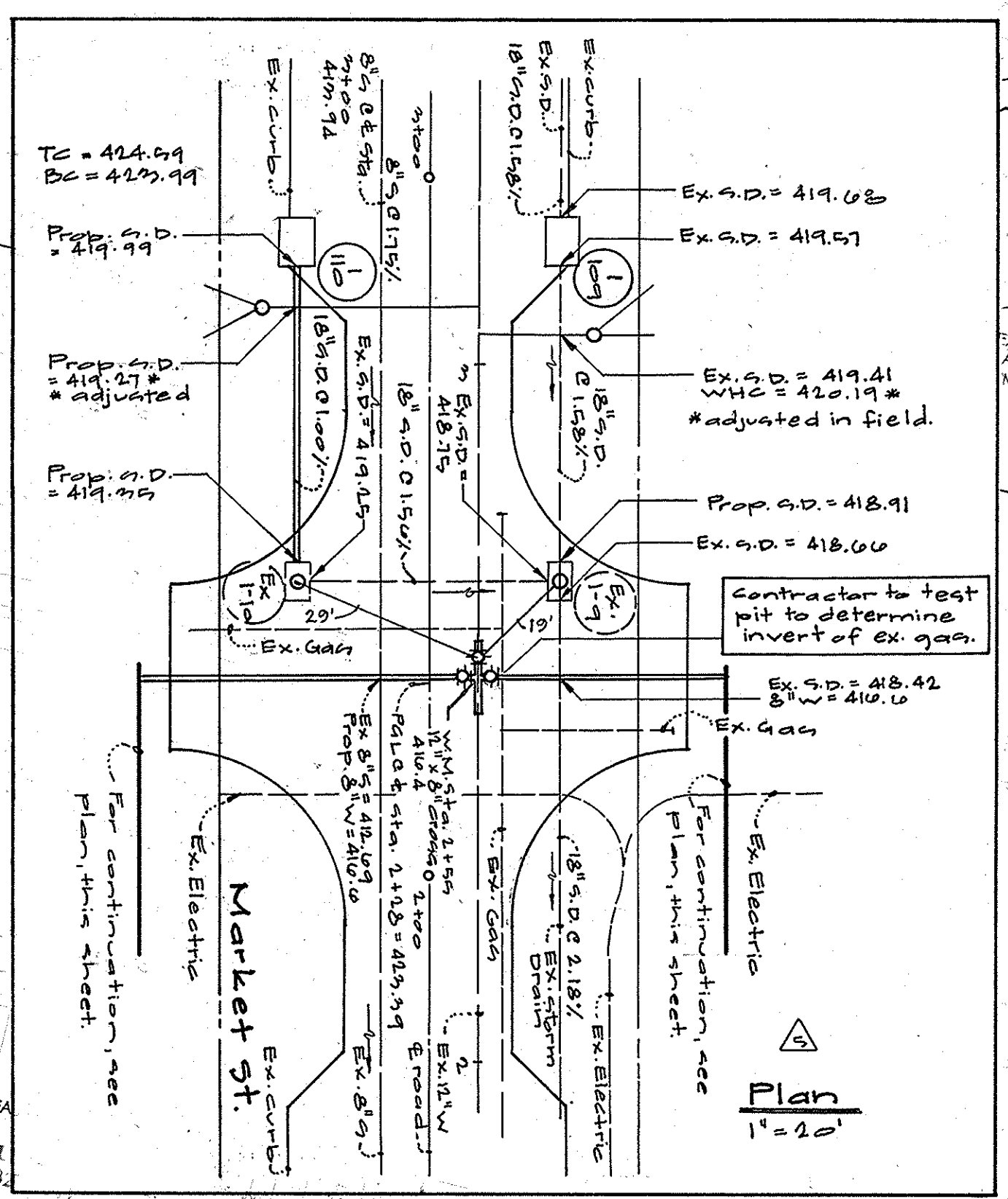
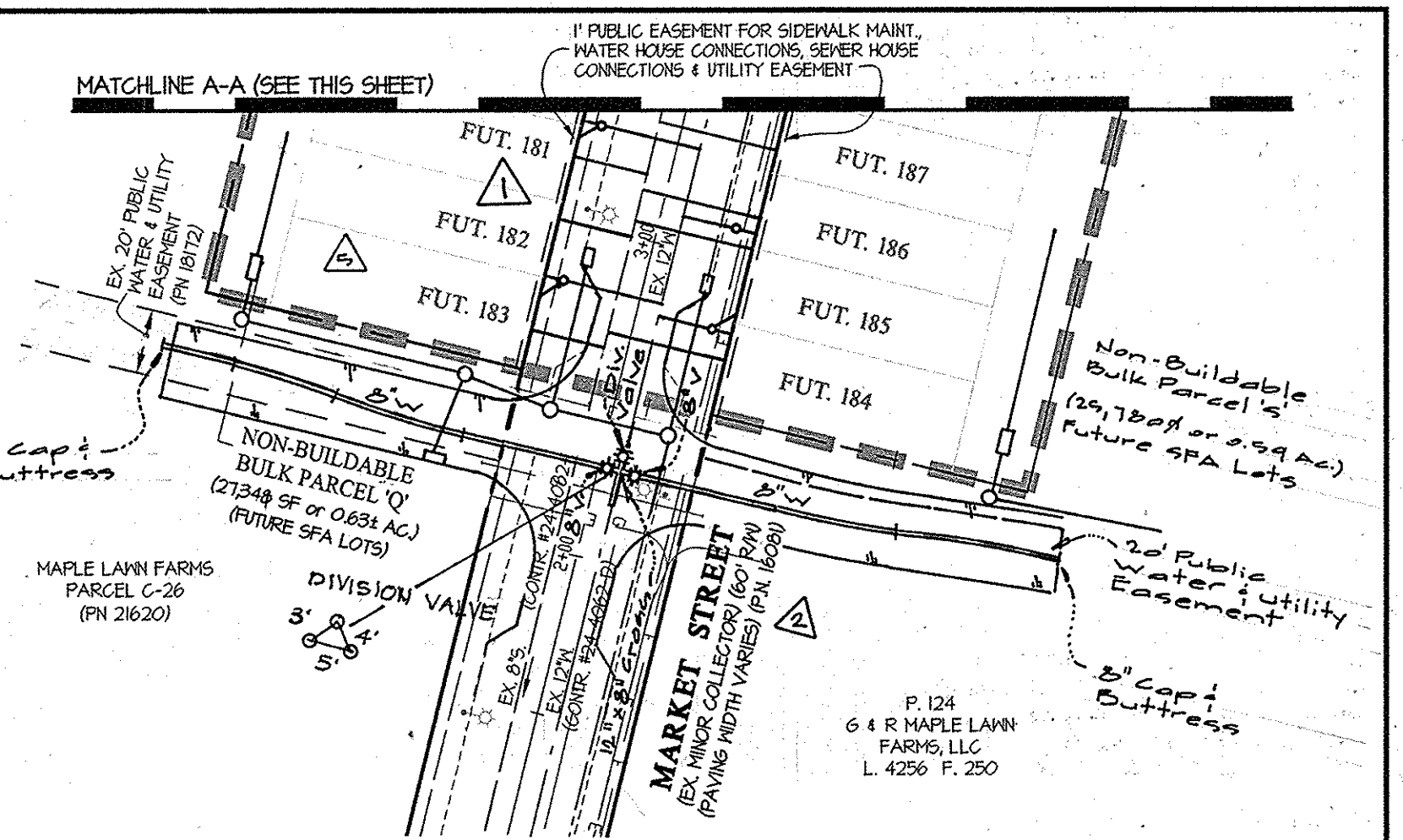
FITTING INFORMATION

W.M. STATION	FITTING	LOCATION
TERRACE LANE	3+82	N 541,434.20 E 1,338,110.02
	4+08	N 541,420.14 E 1,338,148.88

SEWER MANHOLE INFORMATION

MH	LOCATION
101	N 540,141.30 E 1,338,442.60
102	N 540,164.71 E 1,338,843.41
103	N 540,545.00 E 1,338,808.54
104	N 540,548.26 E 1,338,716.16
105	N 540,288.88 E 1,338,441.56
106	N 541,343.14 E 1,338,124.07
107	N 541,431.11 E 1,338,732.42
108	N 541,455.63 E 1,338,754.85
109	N 541,374.14 E 1,334,134.61
110	N 541,370.32 E 1,334,184.97
111	N 541,230.10 E 1,334,104.60
112	N 540,424.77 E 1,338,461.26

- NOTES:**
- ALL SHCS SHOWN SERVING NUMBERED LOTS ARE 4" AND RUN AT 20%.
 - ALL MANHOLES WILL BE STANDARD 4'-0" (6 5/12).
 - OUTSIDE METERS WILL BE PER HOWARD COUNTY DETAIL H 332 FOR THIN CONNECTIONS AND DETAIL H 328 FOR SINGLE CONNECTIONS.
 - ALL SHCS SHOWN SERVING NUMBERED LOTS ARE 1/2".
 - EXISTING VALVE TO BE CLOSED BY DPM FOR CONSTRUCTION.
 - FOR MINIMUM CELLAR ELEVATIONS SEE SHEET 3.
 - CONTRACTOR MUST CLOSE EXISTING VALVE AT THE INTERSECTION OF MARKET STREET AND MAPLE LAWN BOULEVARD PRIOR TO CONNECTING TO EX 12" W.



PREPARED FOR:
 GREENEBAUM DEVELOPMENT, INC
 SUITE 300 WOODHOLME CENTER
 1829 REISTERSTOWN ROAD
 BALTIMORE, MD 21208
 ATTN: MARK BENNETT
 410-484-8400

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONTOWN OFFICE PARK
 BURTONTOWN, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE JAN., 2012
 G.L.W. No. 10001

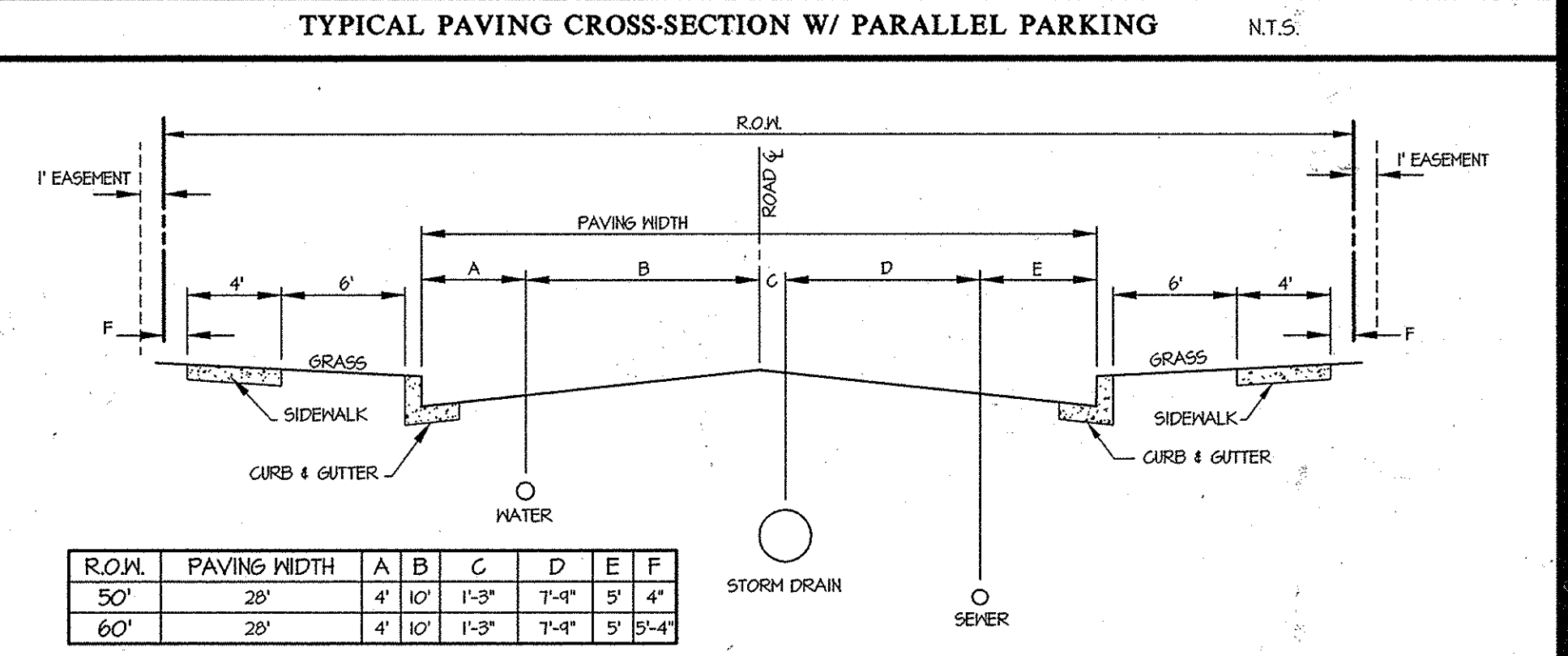
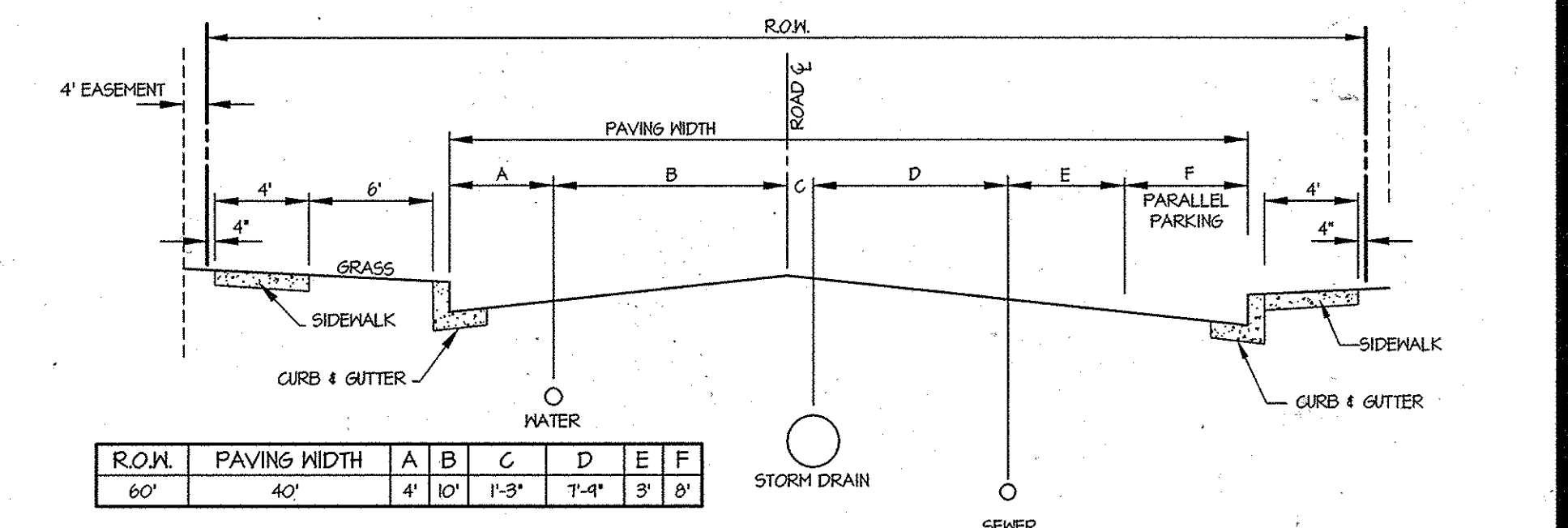
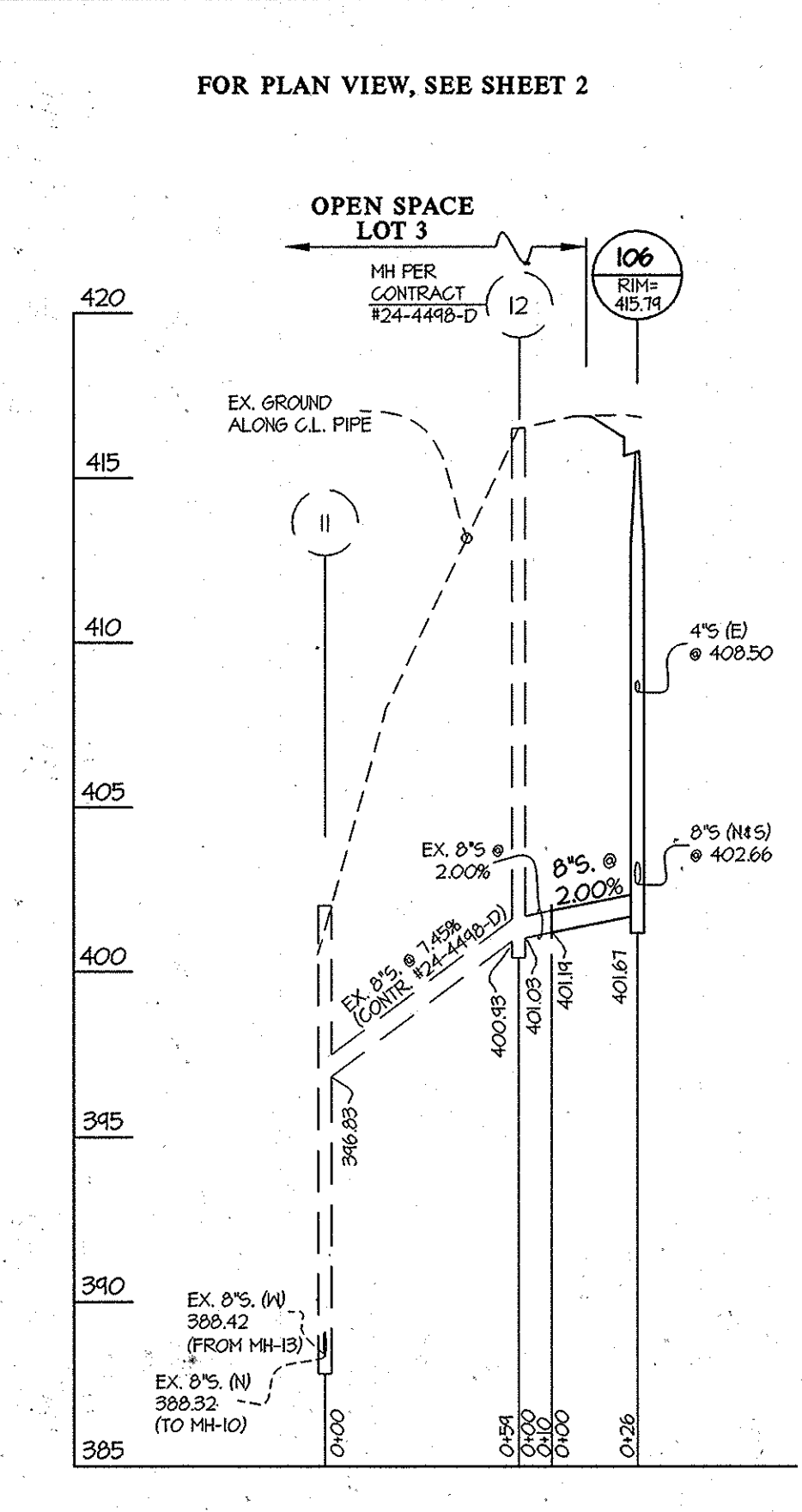
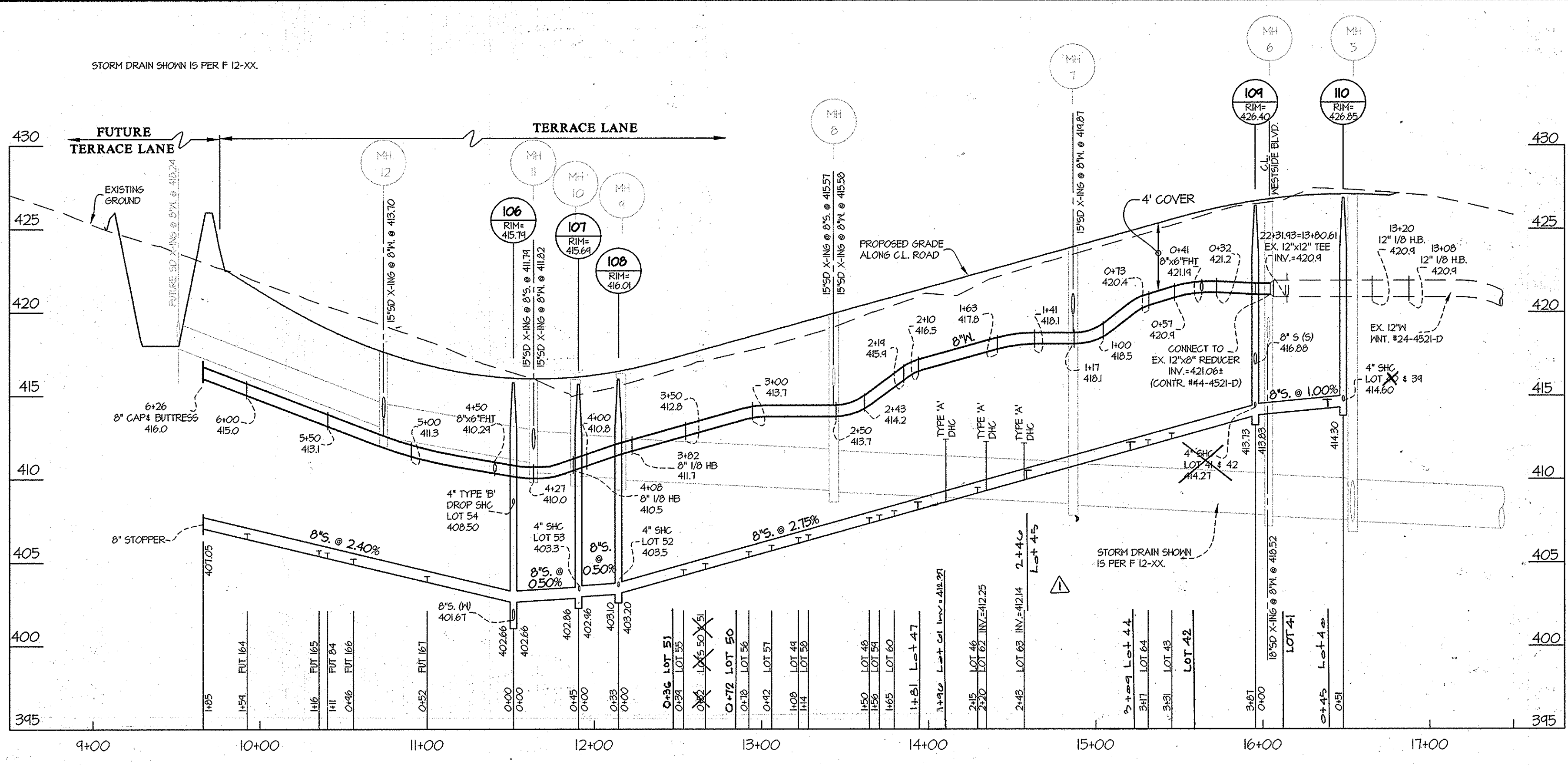
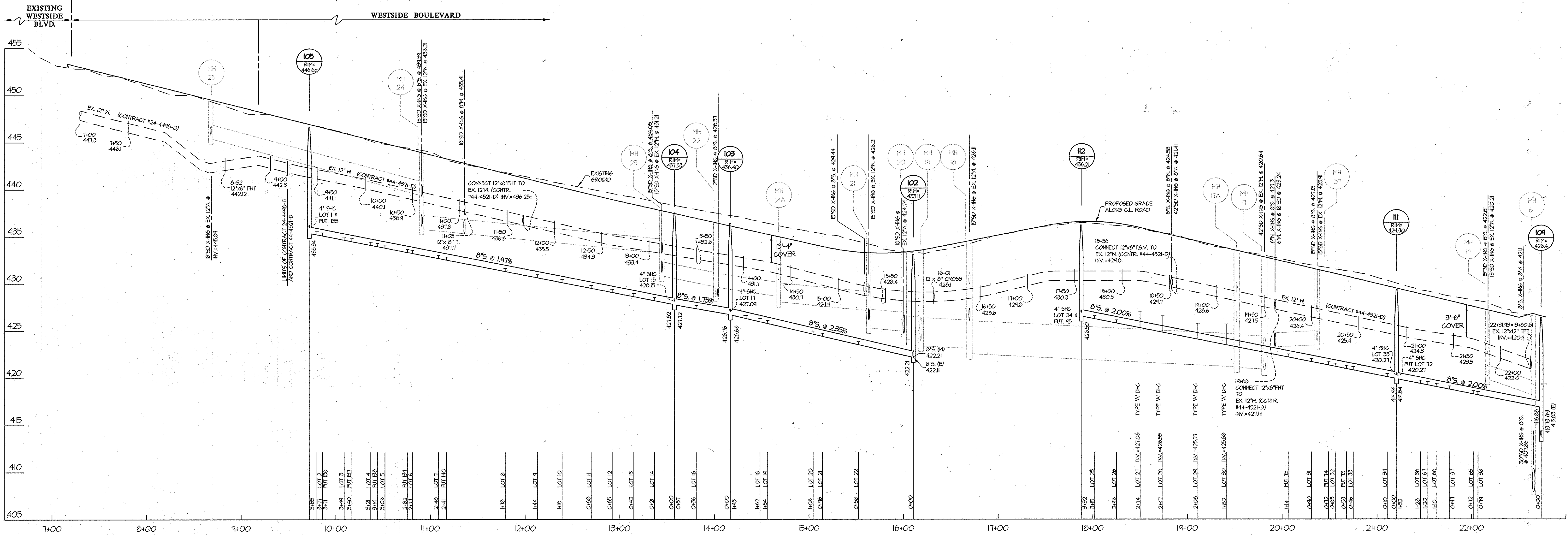
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12375
 EXP. DATE: MAY 26, 2012

REV	DESCRIPTION	DATE
01	Extend 8" W in area being paved to gain access to private alleyway	01-07-12
02	Added 12" W to open space lots 6b	04-23-12
03	Change 6" W to 12" W in lots 44, 45, 47 to reflect field change to accommodate driveway	12-26-12
04	Added 12" W storm drain laterals. Revise curve & gutter storm drain accordingly	11-7-12
05	Added 12" W storm drain along Market St. for future lots	9/26/12

WATER & SEWER PLAN
 600' SCALE MAP NO. 46 BLOCK NO. 4

MAPLE LAWN FARMS
 CONTRACT NO. 24-4701-D
 WESTSIDE DISTRICT - AREA 2
 LOTS 1 THRU 67, OPEN SPACE LOT 68
 COMMON OPEN AREA LOTS 69 THRU 71
 AND NON-BUILDABLE BULK PARCELS "P" THRU "T"
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5

SCALE 1" = 50'
 SHEET 2 OF 4



PREPARED FOR:
 GREENEBAUM DEVELOPMENT, INC
 SUITE 300 WOODHOLME CENTER
 1829 REISTERSTOWN ROAD
 BALTIMORE, MD 21208
 ATTN: MARK BENNETT
 410-484-8400

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

S. Chen
 CHIEF, BUREAU OF UTILITIES
 DATE: 1/28/12

PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

M. G.
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 1/28/12

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1823 DC/VA: 301-389-2524 FAX: 301-421-4186

DATE: JAN., 2012
 G.L.W. No. 10001
 EXP. DATE: MAY 26, 2012

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975
 EXP. DATE: MAY 26, 2012

DEV	BY	NO	REVISION	DATE
91	AK	1	Extend 8' W in area being paved to gain access to private alley. Revises 910' at lot 40, 46, 47 to reflect field change to accommodate driveway	01-07-10
				12-20-12

WATER & SEWER PROFILES

600' SCALE MAP NO. 46 BLOCK NO. 4

MAPLE LAWN FARMS
 CONTRACT No. 24-4701-D
 WESTSIDE DISTRICT - AREA 2
 LOTS 1 THRU 67, OPEN SPACE LOT 68
 COMMON OPEN AREA LOTS 69 THRU 71
 AND NON-BUILDABLE PARCELS 'P' THRU 'T'
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5

SCALE: 1"=50' HORIZ. 1"=5' VERT.
 SHEET 3 OF 4

