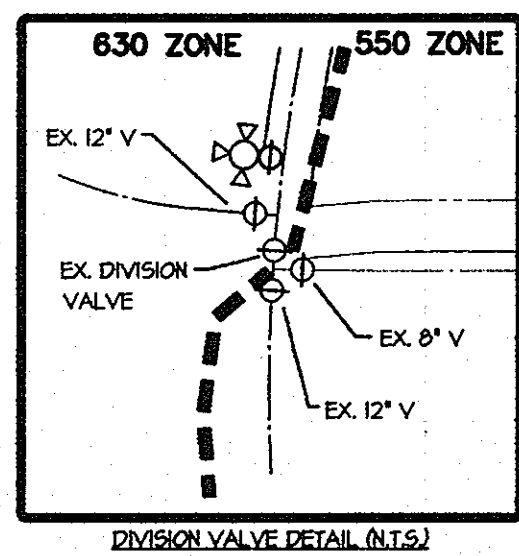
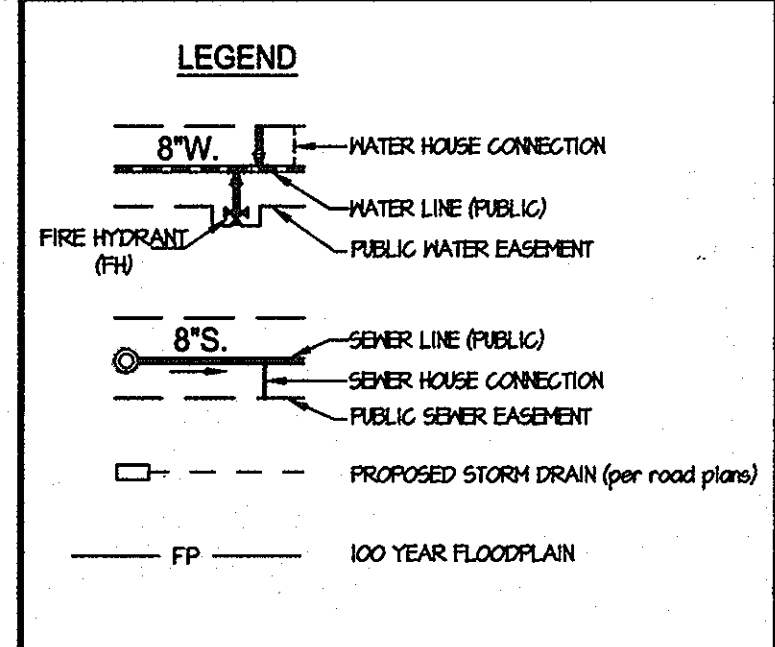


QUANTITIES					
ITEMS	QUANTITIES ESTIMATED	AS-BUILT			
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER	
4" SEWER MANHOLE	25 EA.	25 EA.	Precast	Advanced Drainage Systems	
8" SEWER MAIN	2070 LF.	2,156 LF.	SDR 35	North American	
8" SEWER MAIN (D.I.P.)	264 LF.	269 LF.	D.I.P.	Griffin Pipe Co.	
STAINLESS STEEL CASING	31 LF.	31 LF.	SS	Griffin Pipe Co.	
4" S/C	1,296 LF.	1,300 LF.	SDR 35	North American	
1 1/2" M/C	105 LF.	1,300 LF.	Copper	C.M.C. Howell Metal	
6" WATER MAIN	34 LF.	314 LF.	D.I.P. Class 54	Griffin Pipe Co.	
8" WATER MAIN	3064 LF.	3,160 LF.	D.I.P. Class 54	Griffin Pipe Co.	
6" 1/8" HB.	1 EA.	1 EA.	M.J.	Sigma	
6" 1/6" HB.	2 EA.	2 EA.	M.J.	Sigma	
6" 1/32" HB.	1 EA.	1 EA.	M.J.	Sigma	
8" 1/8" HB.	4 EA.	4 EA.	M.J.	Sigma	
8" 1/6" HB.	7 EA.	7 EA.	M.J.	Sigma	
8" 1/32" HB.	5 EA.	5 EA.	M.J.	Sigma	
8" 1/2" TEE	3 EA.	3 EA.	M.J.	Sigma	
8" 1/2" TEE	3 EA.	3 EA.	M.J.	Sigma	
8" 1/2" FHT	5 EA.	6 EA.	M.J. Tee	Sigma	
FIRE HYDRANT	5 EA.	6 EA.		Kennedy Valve	
12" 1/2" TSV	1 EA.	1 EA.	S.S.	Kennedy Valve	

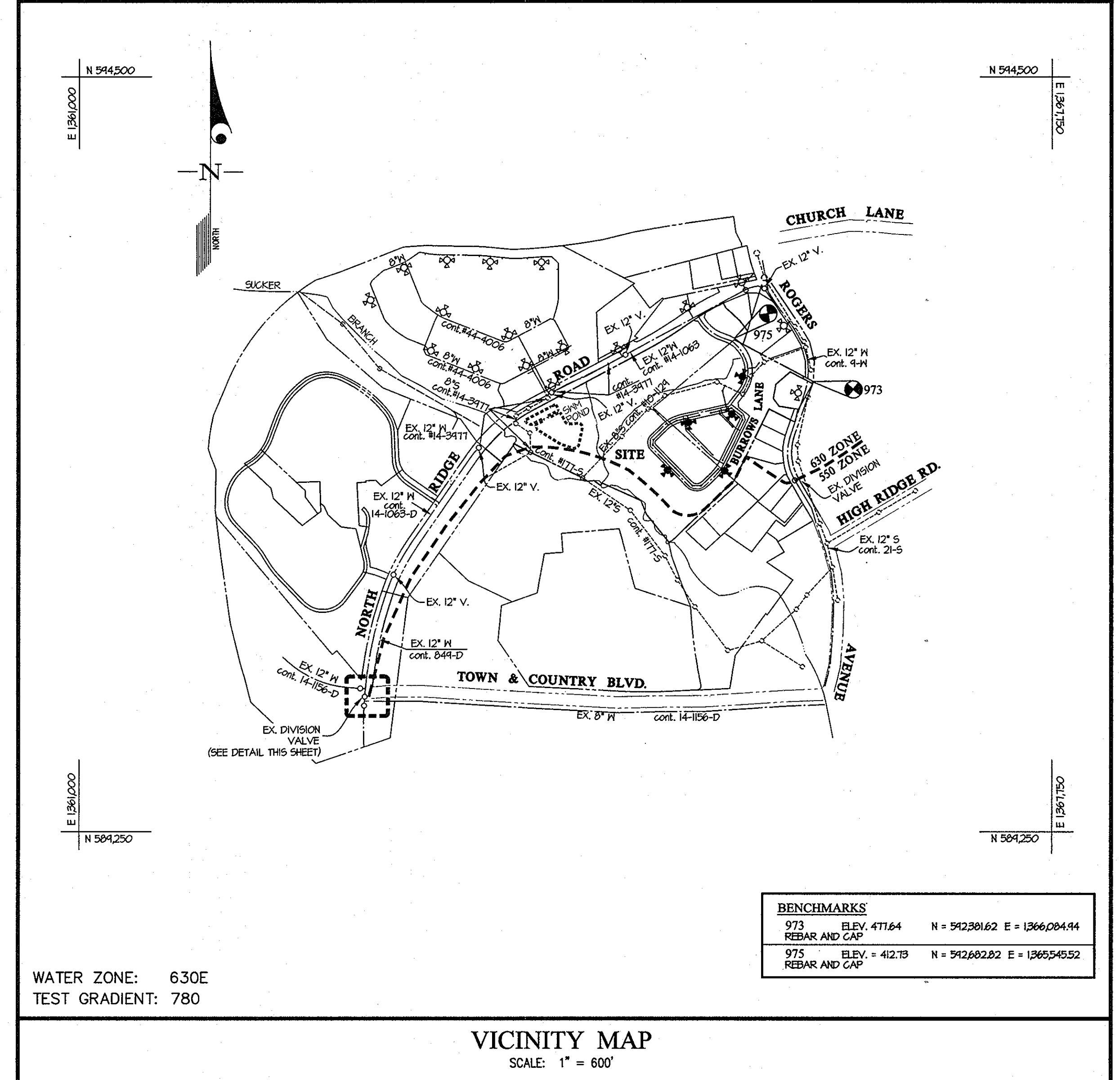
NAME OF UTILITY CONTRACTOR: **Gaines & Company Inc.**

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE:

- NOTES:**
- ALL WATER HOUSE CONNECTIONS TO BE 1-1/2" WITH A 1" OUTSIDE METER, UNLESS NOTED OTHERWISE, SEE HO. CO. STD. DETAIL H-3-20 (SINGLE METER) OR H-3-32 (DUAL METER).
  - ALL SEWER HOUSE CONNECTIONS TO BE 4".



- SHEET INDEX**
- TITLE SHEET
  - WATER & SEWER EXTENSION PLAN
  - WATER & SEWER EXTENSION PLAN
  - WATER & SEWER PROFILES
  - WATER & SEWER PROFILES
  - WATER & SEWER DETAILS



**BENCHMARKS**

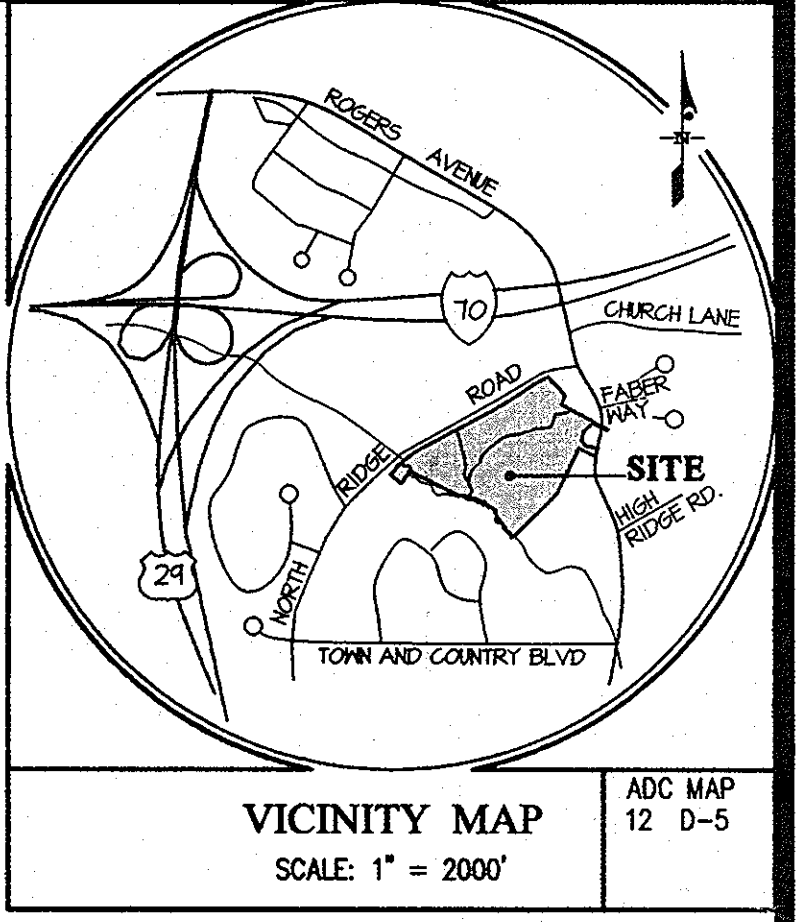
973 REBAR AND CAP	ELEV. 471.64	N = 542301.62	E = 1366004.94
975 REBAR AND CAP	ELEV. 412.73	N = 542602.82	E = 1365545.52

WATER ZONE: 630E  
TEST GRADIENT: 780

**VICINITY MAP**  
SCALE: 1" = 600'

TYPE OF BUILDING	RESIDENTIAL
NUMBER OF UNITS	68
NUMBER OF S.H.C.'s	68
NUMBER OF W.H.C.'s	68
AREA OF RESIDENTIAL LOT/PARCEL	41.4 AC.
SEWER SHED	PATAPSCO
PUMPING STATION	N/A

**CONTRACT No. 14-4607-D**  
**ROGERS PROPERTY**  
LOTS 1 THROUGH 68, OPEN SPACE LOTS 69 THROUGH 70, AND COMMON OPEN AREAS 78 THROUGH 80  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**



- 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.
  - EXISTING TOPOGRAPHY AND FEATURES WERE DERIVED FROM AERIAL TOPOGRAPHY BY 301 IN APRIL, 2000, AVAILABLE PUBLIC RECORDS AND FROM SURVEY BY GUTSCHICK, LITTLE & WEBER, P.A. DONE IN JANUARY, 2007.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS:  
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/11 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS No. 973 AND No. 975.
  - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE 973 & 975.
  - 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  - FOR DETAILS NOT SHOWN ON THE DRAWING, 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 ON THESE PLANS:  
AT&T 1-800-252-1133  
BGE (CONTRACTOR SERVICES) 410-850-4620  
BGE (UNDER GROUND DAMAGE CONTROL) 410-685-1400  
BUREAU OF UTILITIES 410-313-4900  
COLONIAL PIPELINE CO. 410-745-1940  
MISS UTILITY 1-800-251-7777  
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 AREA 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 18.14(a) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
- ALL 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 RESTRAINED AND BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS. THE 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.
  - FIRE SPRINKLER SYSTEMS FOR ALL SINGLE FAMILY DWELLINGS SHALL HAVE A MINIMUM OF A 1/2" CONNECTION WITH A 1" OUTSIDE METER. SEE HOWARD CO. DETAIL H-3-20 FOR SINGLE METER & H-3-32 FOR DUAL METERS.
- PART III - SEWER**
- 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 THE 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 GS-32, WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THE CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS & WITH ROAD DRAWINGS F-10-084; DRAWINGS FOR SEDIMENT & EROSION CONTROL.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

SIGNATURE: *[Signature]* DATE: *[Date]*

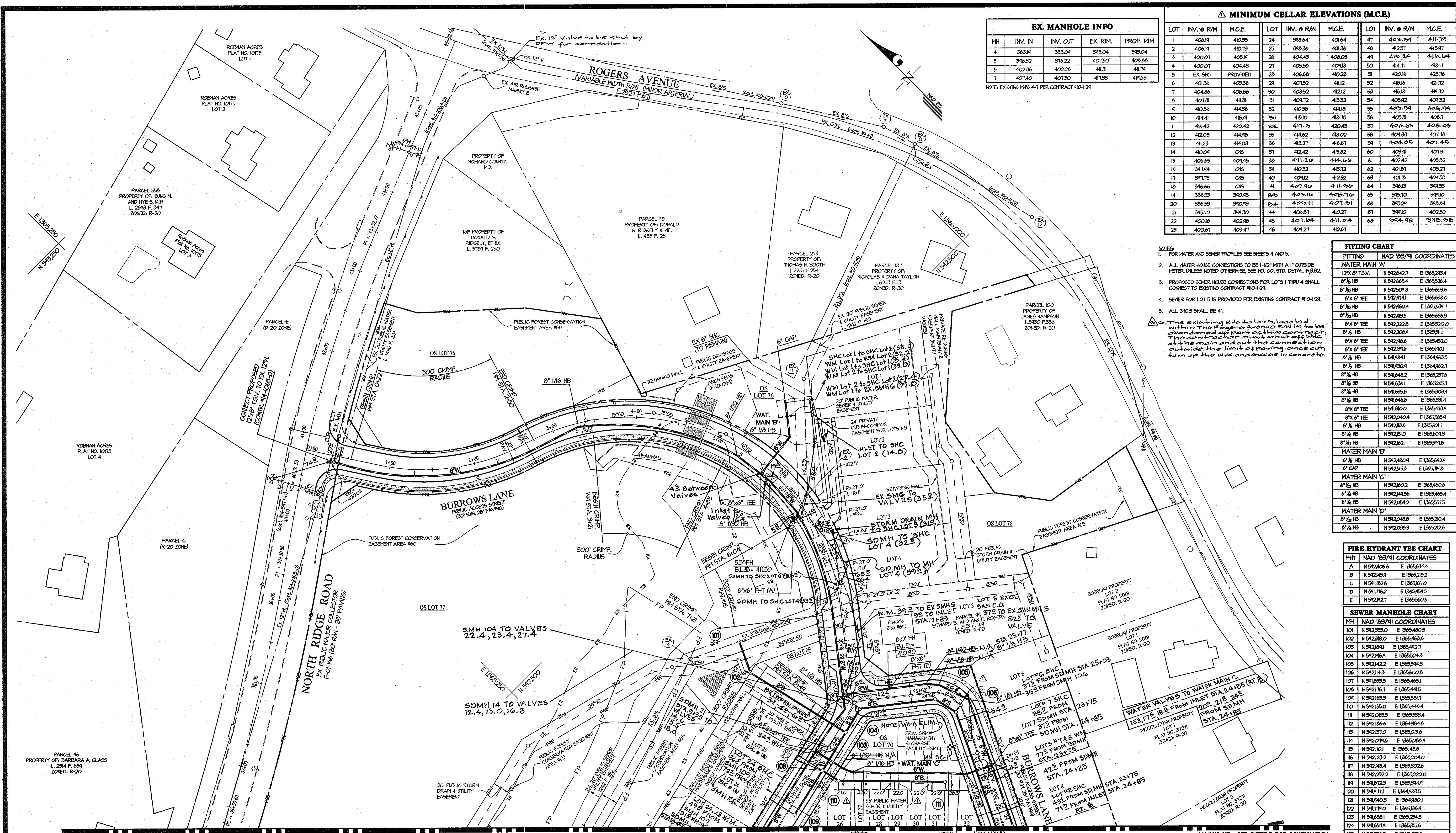
**U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE**

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

APPROVED: *[Signature]* DATE: *[Date]*

PREPARED FOR:  
G&R ROGERS DEVELOPMENT  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: CHARLIE ODOVANOVA  
410-484-8400

<p><b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> <i>[Date]</i> CHIEF, BUREAU OF UTILITIES</p>	<p><b>DEPARTMENT OF PLANNING AND ZONING</b> HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> <i>[Date]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION</p>	<p><b>GLW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT. 410-880-1820 DC/VA 301-999-2524 FAX: 301-421-4186</p>	<p>DATE: MAY, 2010</p> <p>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 28, 2012</p> <p>G.L.W. No. 06079</p>	<p>Rev. length in number of 1/2" x 1/2" sheets. 7/2/12</p> <p>LEM Completed "QUANTITIES" Table</p>	<p><b>COVER SHEET</b></p> <p>600' SCALE MAP NO. 17 BLOCK NO. 18/24</p>	<p><b>ROGERS PROPERTY</b> CONTRACT No. 14-4607-D LOTS 1 THROUGH 68, OPEN SPACE LOTS 69 THROUGH 77, AND COMMON OPEN AREAS 78 THROUGH 80 HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 6</p>	<p>SCALE AS SHOWN</p> <p>SHEET 1 OF 6</p>
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EX. MANHOLE INFO				
MH	INV. IN	INV. OUT	EX. RIM	PROP. RIM
4	383.81	383.04	393.04	393.04
5	396.32	396.22	407.60	408.88
6	402.36	402.26	411.31	411.74
7	401.40	401.30	411.33	411.63

NOTE: EXISTING MHS 4-1 PER CONTRACT #10-1121

MINIMUM CELLAR ELEVATIONS (M.C.E.)								
LOT	INV. @ R/W	M.C.E.	LOT	INV. @ R/W	M.C.E.			
1	406.14	410.55	24	398.64	410.64			
2	406.14	410.73	25	398.36	410.36			
3	400.01	405.91	26	404.49	408.03			
4	400.01	404.49	27	405.58	404.10			
5	EX. SHC PROVIDED	28	406.68	410.28	51	420.16	423.16	
6	401.36	405.36	29	407.52	411.2	52	418.16	421.72
7	404.86	408.86	30	408.52	412.12	53	416.16	419.72
8	407.31	411.31	31	409.12	413.32	54	405.92	409.32
9	410.36	414.36	32	410.50	414.10	55	407.94	408.94
10	414.41	418.41	33	415.10	418.10	56	405.31	408.71
11	416.42	420.42	34	417.79	420.43	57	404.69	408.09
12	412.09	414.09	35	414.82	418.02	58	404.33	407.73
13	411.23	414.03	36	413.21	416.61	59	404.05	407.45
14	410.04	413.04	37	412.42	415.82	60	403.91	407.31
15	406.65	409.65	38	411.24	414.44	61	402.42	405.82
16	391.94	395.94	39	410.32	413.32	62	401.81	405.21
17	391.73	395.73	40	409.12	412.52	63	401.8	405.2
18	396.66	400.66	41	407.94	411.94	64	396.13	399.53
19	396.53	399.53	42	407.10	410.70	65	395.10	398.10
20	396.53	399.53	43	407.71	410.71	66	395.21	398.61
21	395.10	398.10	44	406.81	410.21	67	394.10	402.50
22	400.18	402.18	45	407.64	411.04	68	394.43	397.83
23	400.61	403.61	46	409.21	412.61			

- NOTES:
- FOR WATER AND SEWER PROFILES SEE SHEETS 4 AND 5.
  - ALL WATER HOUSE CONNECTIONS TO BE 1/2" WITH A 1" OUTSIDE METER, UNLESS NOTED OTHERWISE, SEE HO. CO. STD. DETAIL #B32.
  - PROPOSED SEWER HOUSE CONNECTIONS FOR LOTS 1 THRU 4 SHALL CONNECT TO EXISTING CONTRACT #10-1121.
  - SEWER FOR LOT 5 IS PROVIDED PER EXISTING CONTRACT #10-1121.
  - ALL SHCS SHALL BE 4".
- NOTE: The existing WMC to lots located within the Rogers Avenue R/W is to be abandoned as part of this contract. The contractor must cut off WMC at the main and cut the connection outside the limit of paving once cut, turn up the WMC and encase in concrete.

FITTING CHART		
FITTING	NAD '83/11 COORDINATES	
<b>WATER MAIN 'A'</b>		
12" X 8' T.S.V.	N 912422.41	E 1365239.4
8" X 1/2" HB	N 912465.4	E 1365236.4
8" X 1/2" HB	N 912509.8	E 1365236.6
8" X 0" TEE	N 912474.1	E 1365238.0
8" X 1/2" HB	N 912460.4	E 1365239.1
8" X 1/2" HB	N 912485	E 1365236.3
8" X 0" TEE	N 912222.8	E 1365232.0
8" X 1/2" HB	N 912208.4	E 1365231.1
8" X 0" TEE	N 912486	E 1365232.0
8" X 0" TEE	N 912394	E 1365201
8" X 1/2" HB	N 911841	E 1364463.5
8" X 1/2" HB	N 911804	E 1364462.7
8" X 1/2" HB	N 911482	E 1365237.6
8" X 1/2" HB	N 911631	E 1365235.7
8" X 1/2" HB	N 911636	E 1365235.4
8" X 1/2" HB	N 91146.8	E 1365234.4
8" X 0" TEE	N 91100.0	E 1365234.4
8" X 0" TEE	N 912040.4	E 1365235.4
8" X 1/2" HB	N 91213.6	E 1365232.1
8" X 1/2" HB	N 91210.0	E 1365231.0
8" X 1/2" HB	N 91262.1	E 1365231.0
<b>WATER MAIN 'B'</b>		
8" X 1/2" HB	N 912480.4	E 1365242.4
8" X 0" TEE	N 91235.3	E 1365231.0
<b>WATER MAIN 'C'</b>		
8" X 1/2" HB	N 912402	E 1365440.6
8" X 1/2" HB	N 912443.6	E 1365445.4
8" X 1/2" HB	N 91254.2	E 1365551.5
<b>WATER MAIN 'D'</b>		
8" X 1/2" HB	N 91248.8	E 1365210.4
8" X 1/2" HB	N 91228.3	E 1365212.6

FIRE HYDRANT TEE CHART		
FHT	NAD '83/11 COORDINATES	
A	N 912406.6	E 1365344.4
B	N 912454	E 1365282.2
C	N 91182.6	E 1365070
D	N 91176.2	E 1365464.5
E	N 91242.7	E 1365500.6

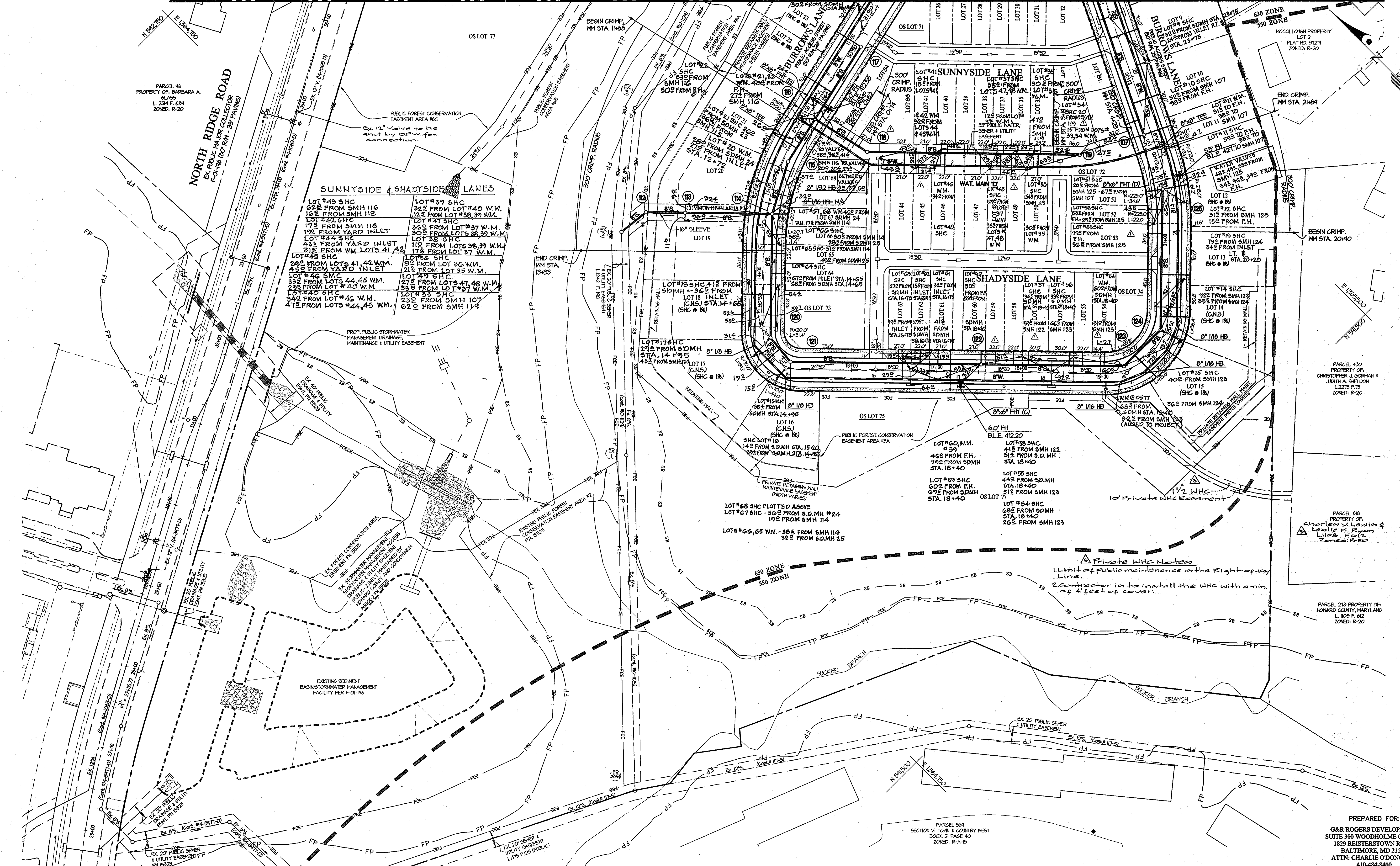
SEWER MANHOLE CHART		
MH	NAD '83/11 COORDINATES	
101	N 912359.0	E 1365480.5
102	N 912389.0	E 1365463.6
103	N 912441	E 1365442.7
104	N 912464	E 1365524.3
105	N 912422	E 1365544.3
106	N 91244.3	E 1365600.8
107	N 911835.5	E 1365465.1
108	N 91216.7	E 1365441.5
109	N 91216.3	E 1365381.7
110	N 91255.0	E 1365446.4
111	N 912065.5	E 1365533.4
112	N 91216.6	E 1364484.8
113	N 91215.0	E 1365036.6
114	N 91217.6	E 1365088.4
115	N 91210.1	E 1365458.8
116	N 91223.2	E 1365204.0
117	N 91245.4	E 1365222.6
118	N 91252.2	E 1365220.0
119	N 91187.3	E 1365344.8
120	N 91177.1	E 1364483.5
121	N 91140.3	E 1364480.1
122	N 91174.0	E 1365236.4
123	N 91168.1	E 1365254.5
124	N 91165.1	E 1365356.6
125	N 91174.2	E 1365423.3

MATCHLINE - SEE SHEET 3 FOR CONTINUATION

- LOT #25 W.M. 34.3 FROM INLET STA. 9+35
- 26.2 FROM SMH 108
- SHC 33.6 FROM SMH 108
- 32.2 FROM INLET STA. 9+35
- LOT #26 W.M. 33.4 FROM INLET STA. 9+35
- 6.0 FROM SMH 110
- SHC 40.2 FROM INLET STA. 9+35
- 11.8 FROM SMH 110
- LOT #27 W.M. 92.2 FROM SMH 111
- 32.3 FROM SMH 110
- SHC 43.5 FROM SMH 110
- 9.2 FROM SMH 111
- LOT #28, 29 W.M. 64.5 FROM SMH 111
- DUAL 6.0 FROM SMH 110
- LOT #28 SHC 67.2 FROM SMH 111
- 7.2 FROM SMH 111
- LOT #29 SHC 85.2 FROM SMH 110
- 58.8 FROM SMH 111
- LOT #30 W.M. 103.6 FROM SMH 110
- #31 DUAL 23.4 FROM SMH 111
- LOT #30 SHC 41.0 FROM SMH 111
- 6.0 FROM SMH 110
- SC-1
- LOT #31 SHC 19.2 FROM SMH 111
- 5.8 FROM INLET STA. 24+80
- LOT #32 W.M. 11.5 TO SMH 111
- 38.8 TO INLET STA. 24+80
- SHC 11.2 TO SMH 111
- 47.2 TO INLET STA. 24+80

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division	<b>GLWGuttschick Little &amp; Weber, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONVILLE OFFICE PARK BURTONVILLE, MARYLAND 20886 TEL: 301-421-4024 FAX: 301-421-4188	DATE MAY, 2010	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	WATER AND SEWER EXTENSION PLAN 600' SCALE MAP NO. 17 BLOCK NO. 18/24	<b>ROGERS PROPERTY</b> CONTRACT No. 14-4607-D LOTS 1 THROUGH 68, OPEN SPACE LOTS 69 THROUGH 77, AND COMMON OPEN AREAS 78 THROUGH 80 HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 6	SCALE 1" = 50'
			G.L.W. No. 06079				SHEET 2 OF 6

L:\CADD\DRAWINGS\06079\NS\FINAL\06079PWS02-03.dwg  
 PLOT: 10/14/2010 4:36 PM, LAST SAVE: 5/17/2010 1:03 PM, PLOTTED BY: Tony Cooper



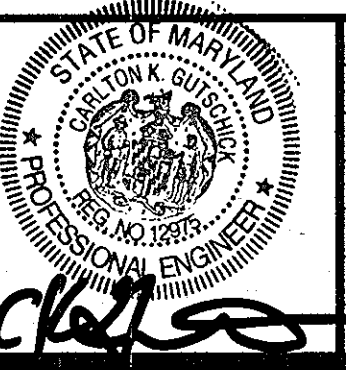
**Private WHC Notes**  
 1. Limit of public maintenance is the Right-of-Way Line.  
 2. Contractor is to install the WHC with a min. of 4' feet of cover.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 Date

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND  
 Chief, Development Engineering Division  
 Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL. 301-421-4024 BALT. 410-880-1820 DC/VA. 301-989-2524 FAX 301-421-4186

DATE MAY, 2010  
 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. 12875  
 EXP. DATE MAY 26, 2012



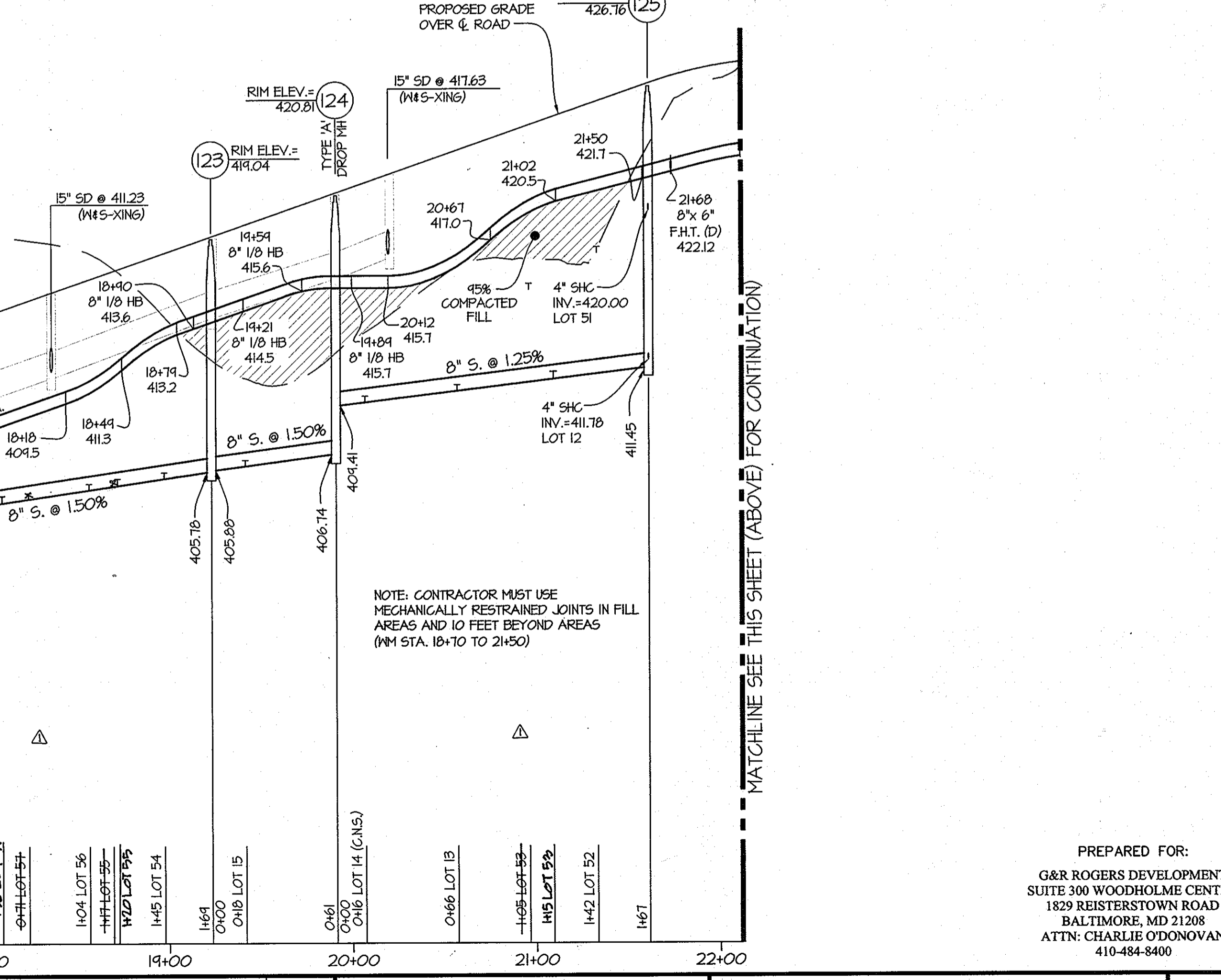
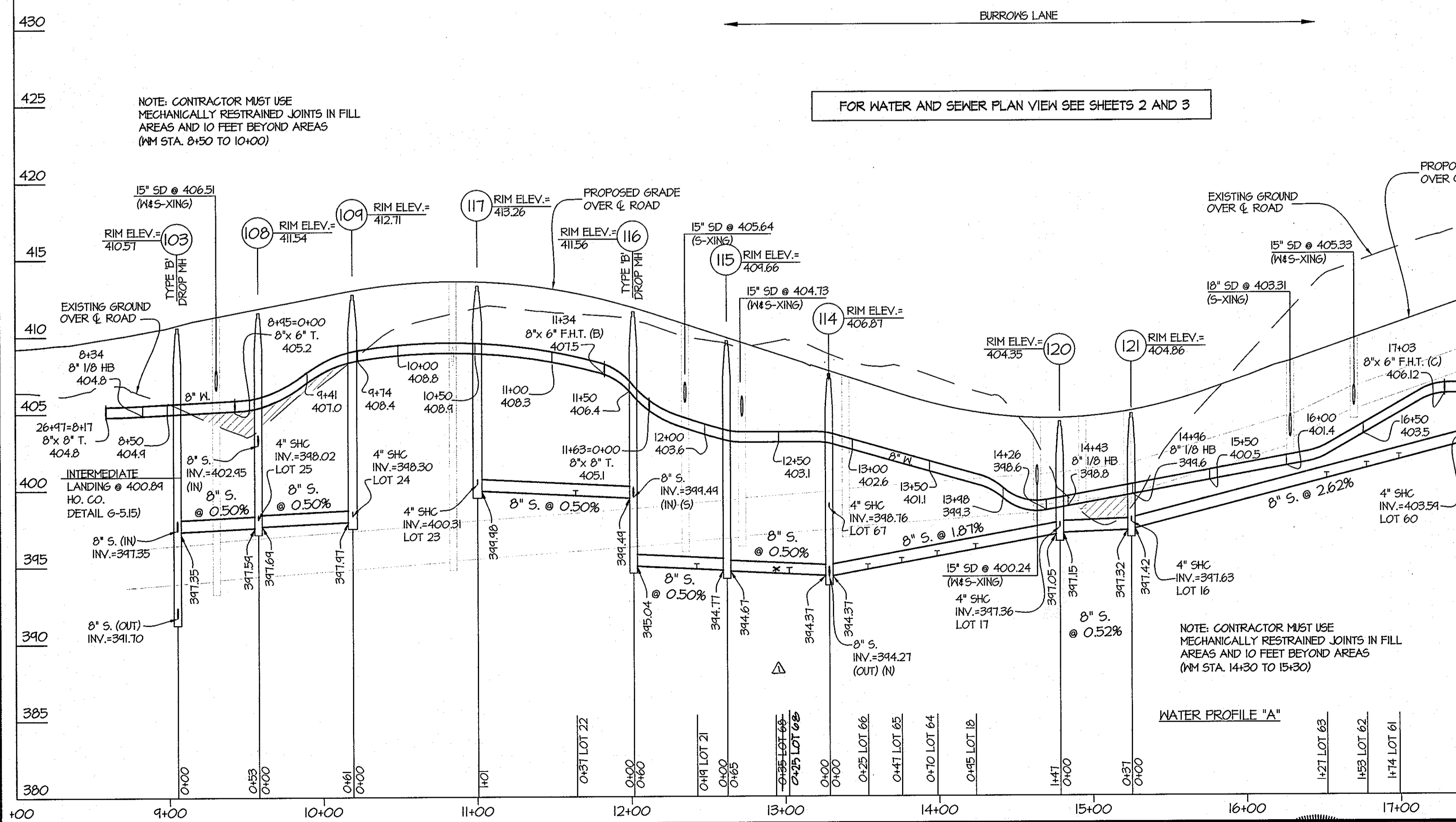
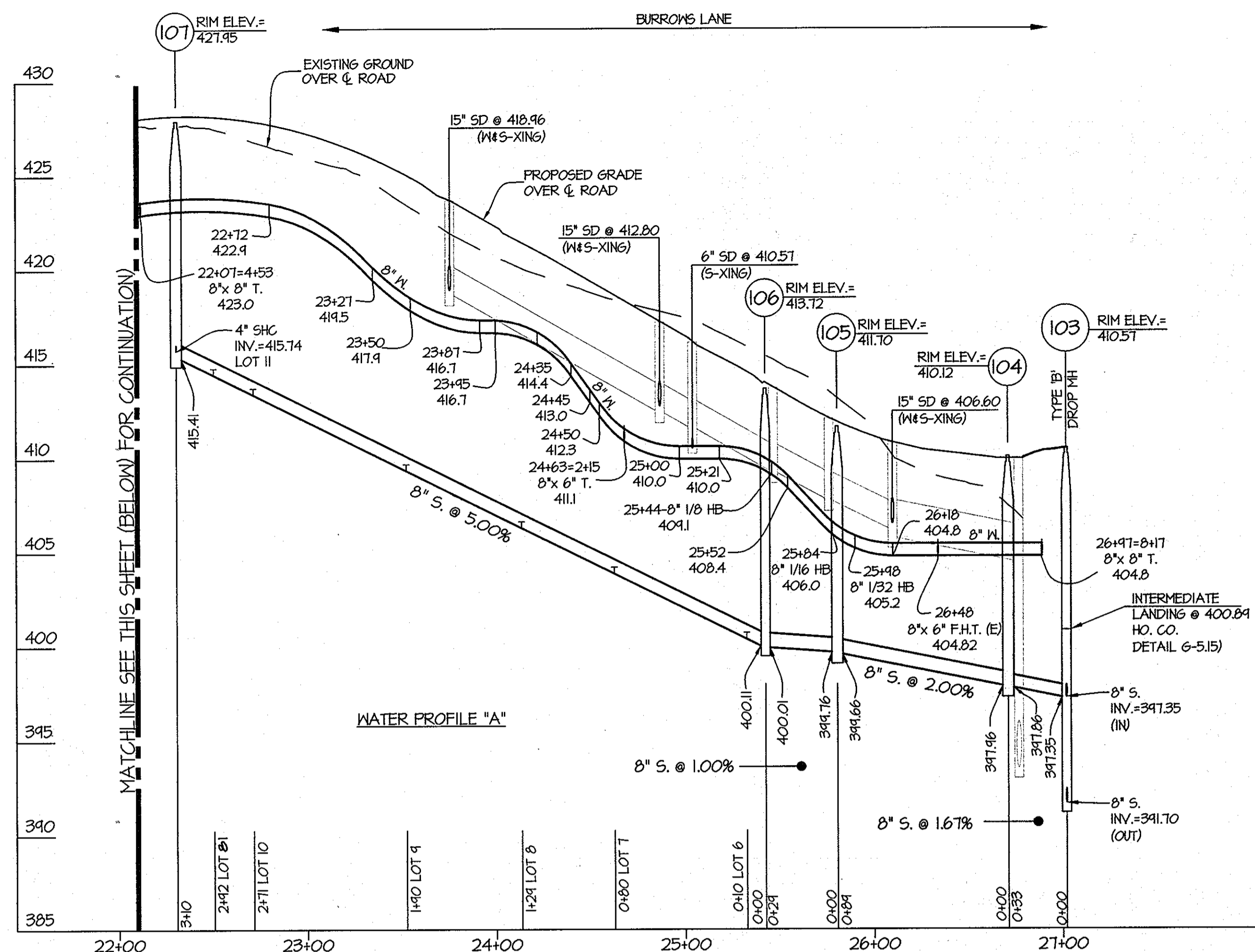
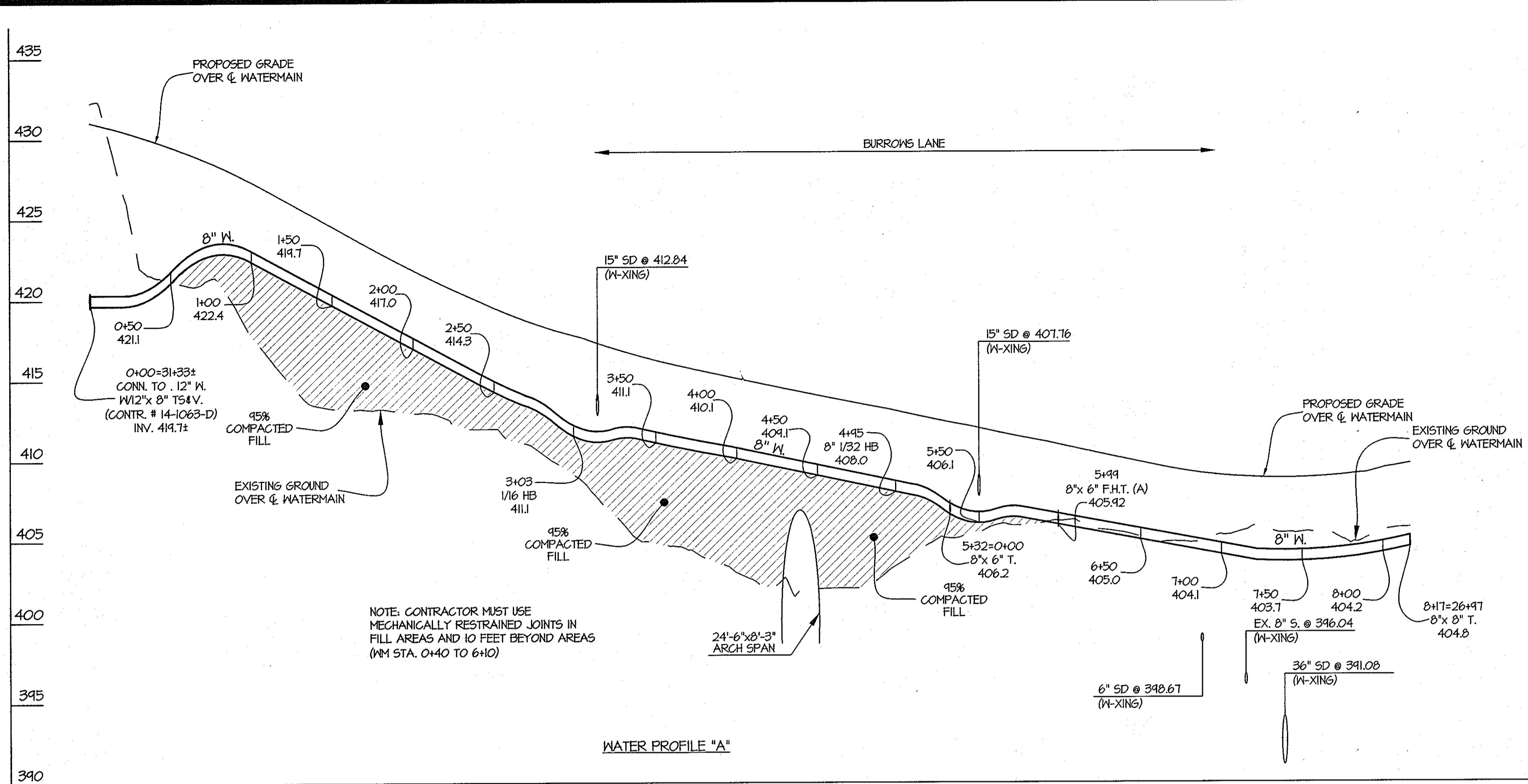
NO.	REVISION	DATE
1	Provide Private WHC to Adjacent Property	5/6/12
2	WATER & SEWER LOCATIONS	7/6/12
3	Rev. SHC Lots 41, 44, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	10/17/11

WATER AND SEWER EXTENSION PLAN  
 600' SCALE MAP NO. 17 BLOCK NO. 18/24

**ROGERS PROPERTY**  
 CONTRACT No. 14-4607-D  
 LOTS 1 THROUGH 68,  
 OPEN SPACE LOTS 69 THROUGH 77, AND  
 COMMON OPEN AREAS 78 THROUGH 80  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 6

SCALE 1"=50'  
 SHEET 3 OF 6

L:\CADD\DRAWINGS\06079\WS\FINAL\06079\WS\02-03.dwg  
 PLOTTED: 5/7/2010 4:58 PM, JOB: 14-4607-D, 1:53 PM, PLOTTED BY: 109, 109/10



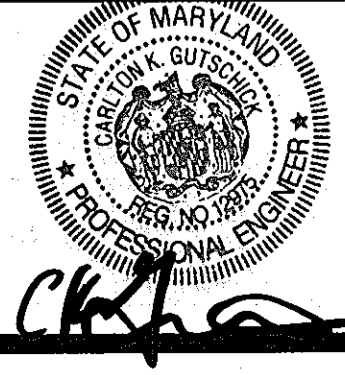
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

**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 BALT: 410-883-1820 DC/VA: 301-883-2524 FAX: 301-421-4186

DATE  
MAY, 2010

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



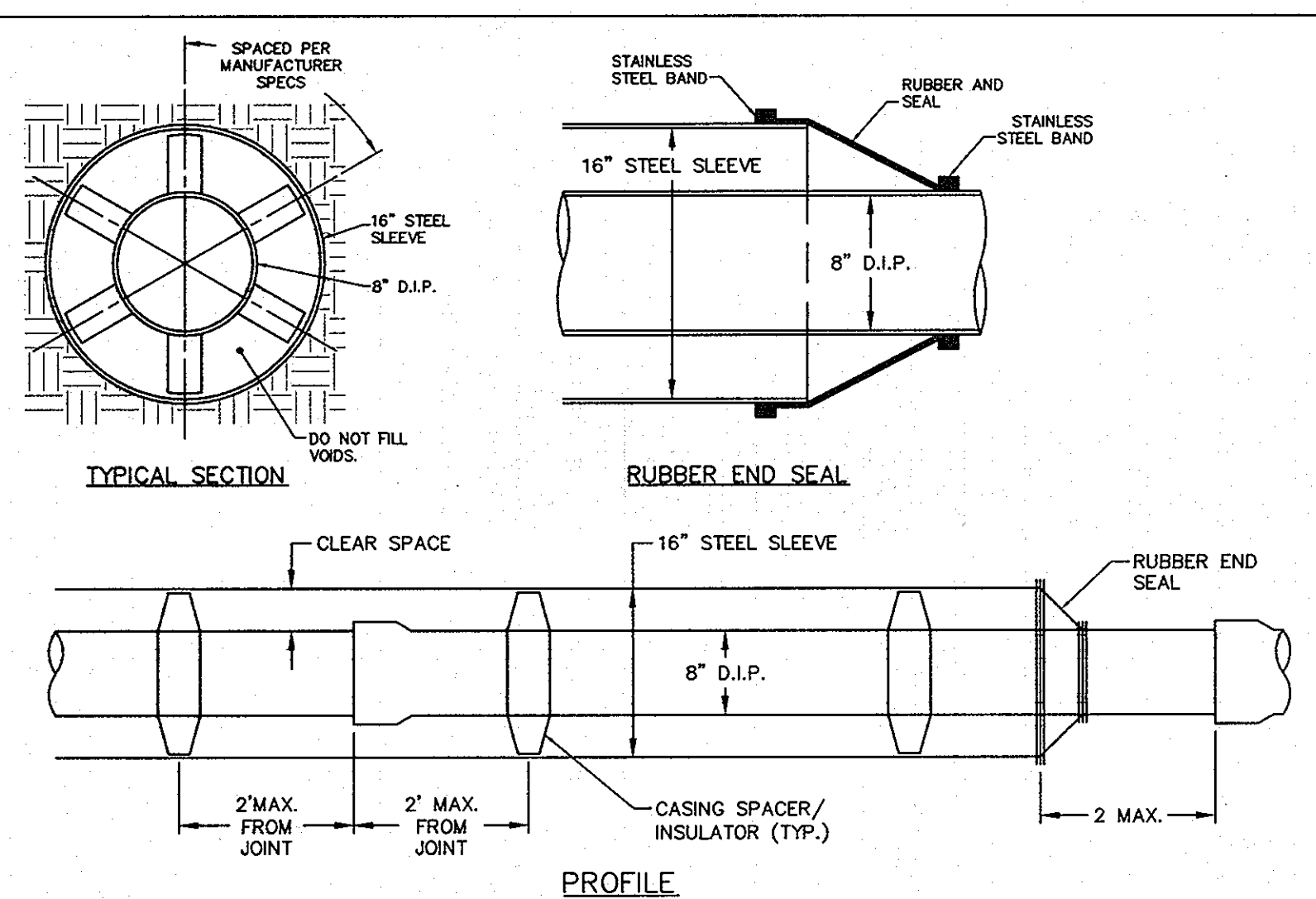
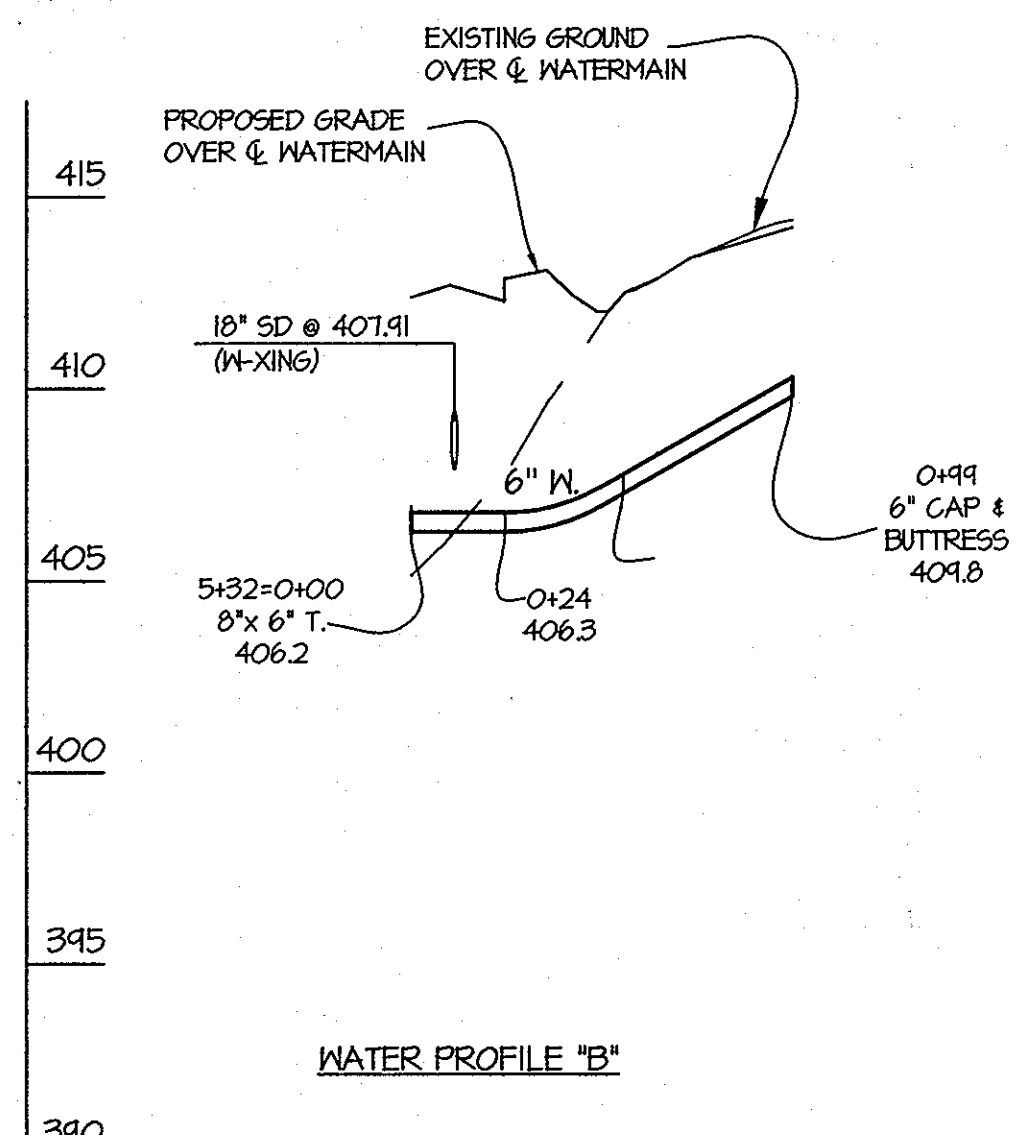
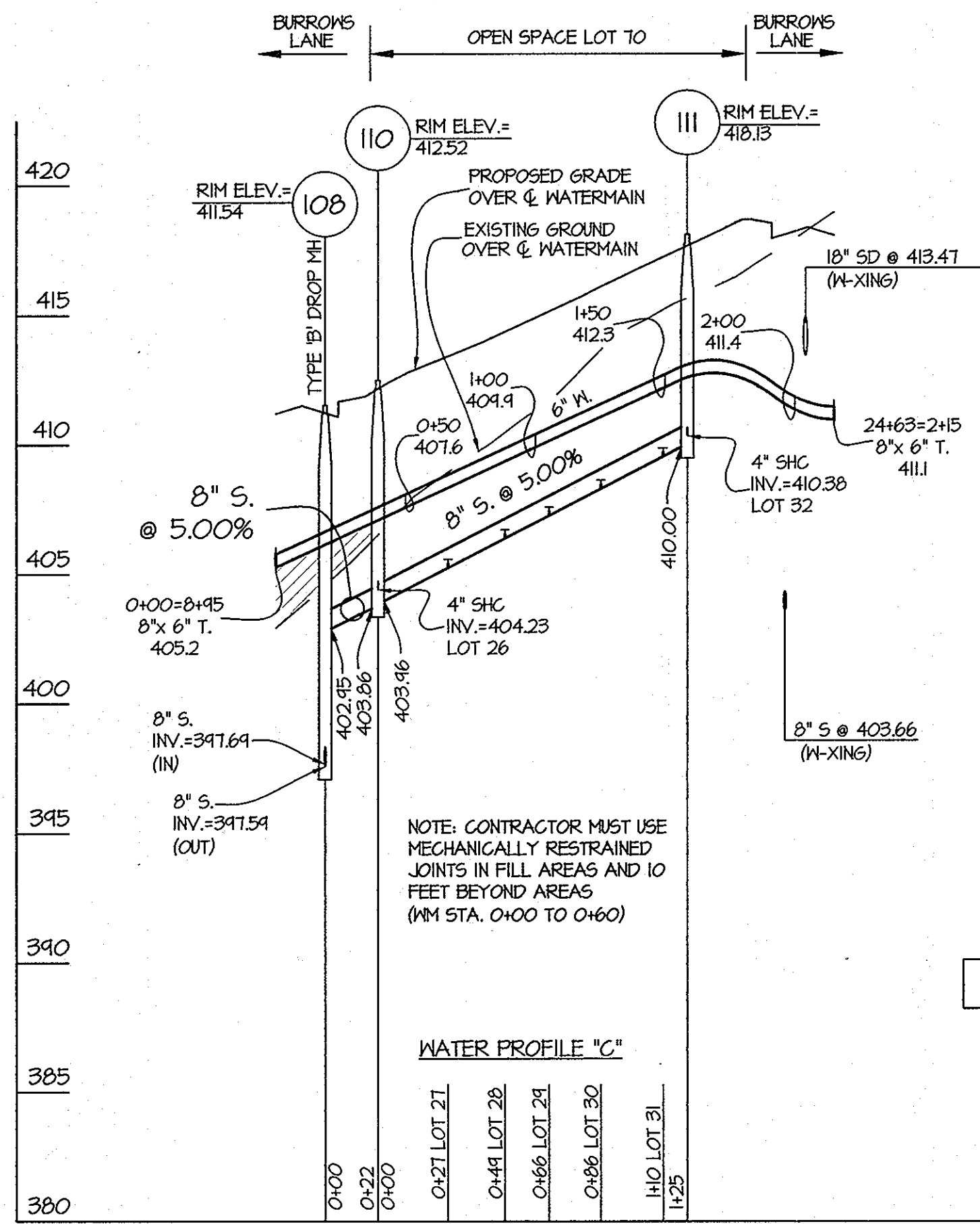
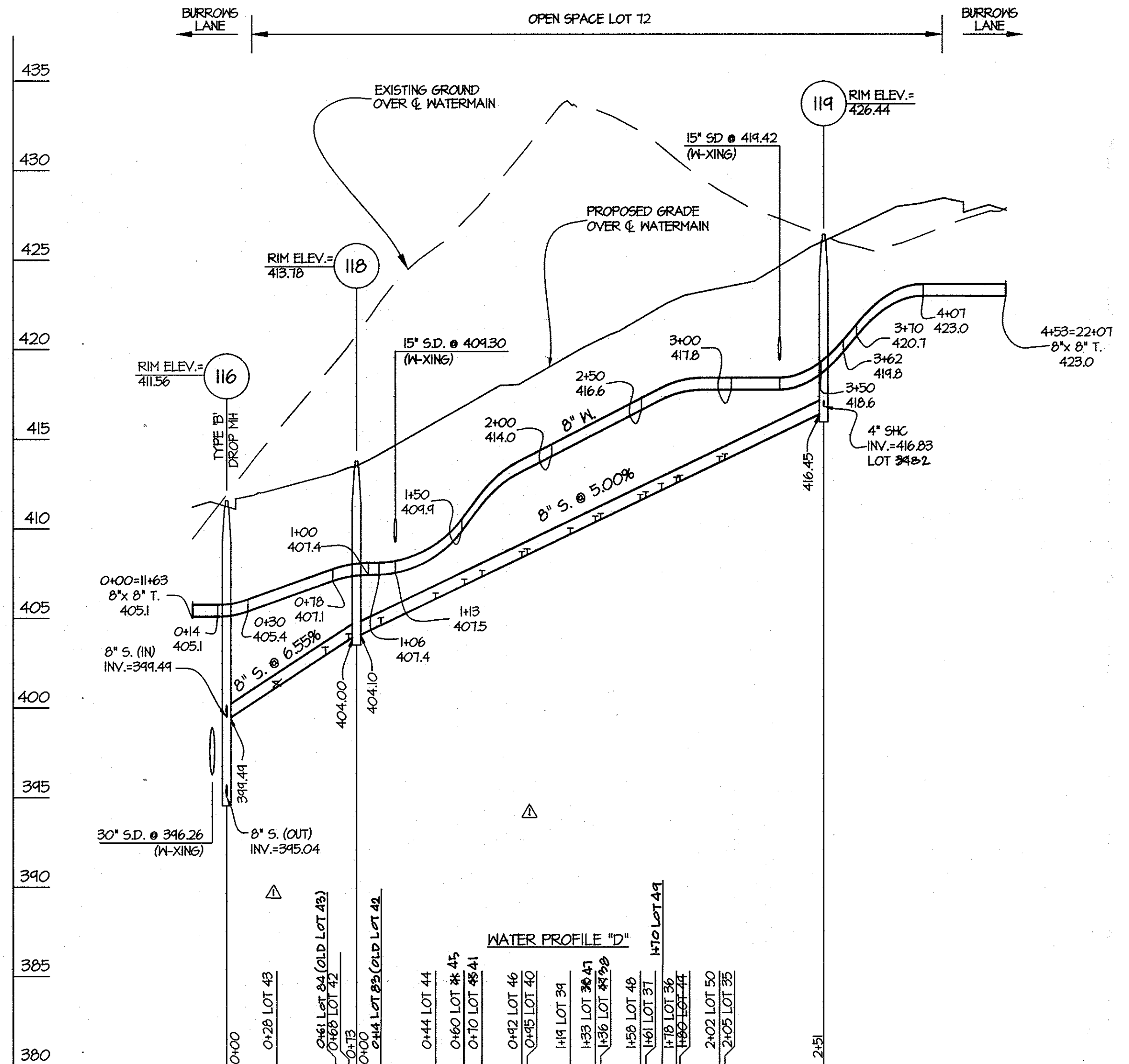
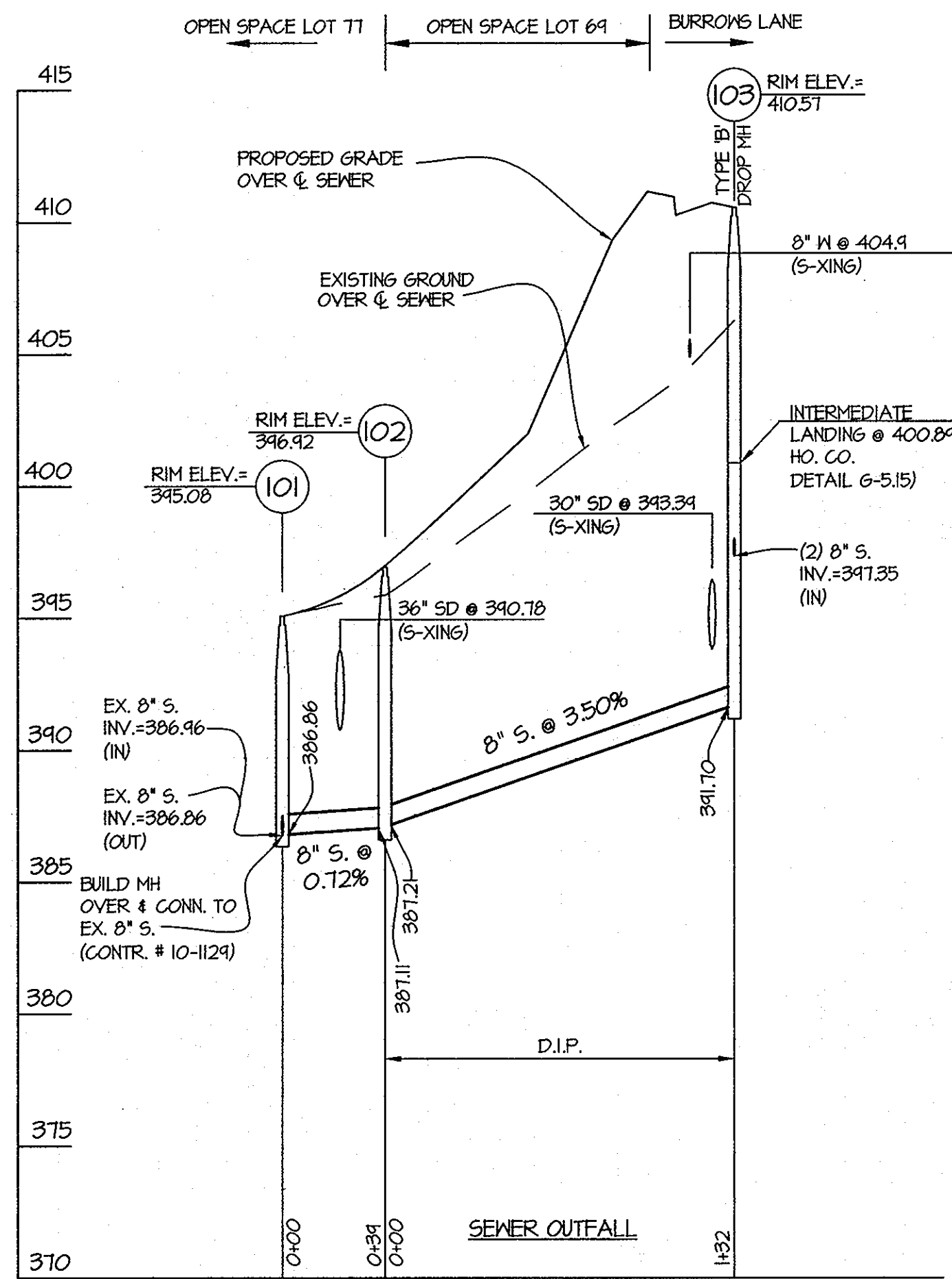
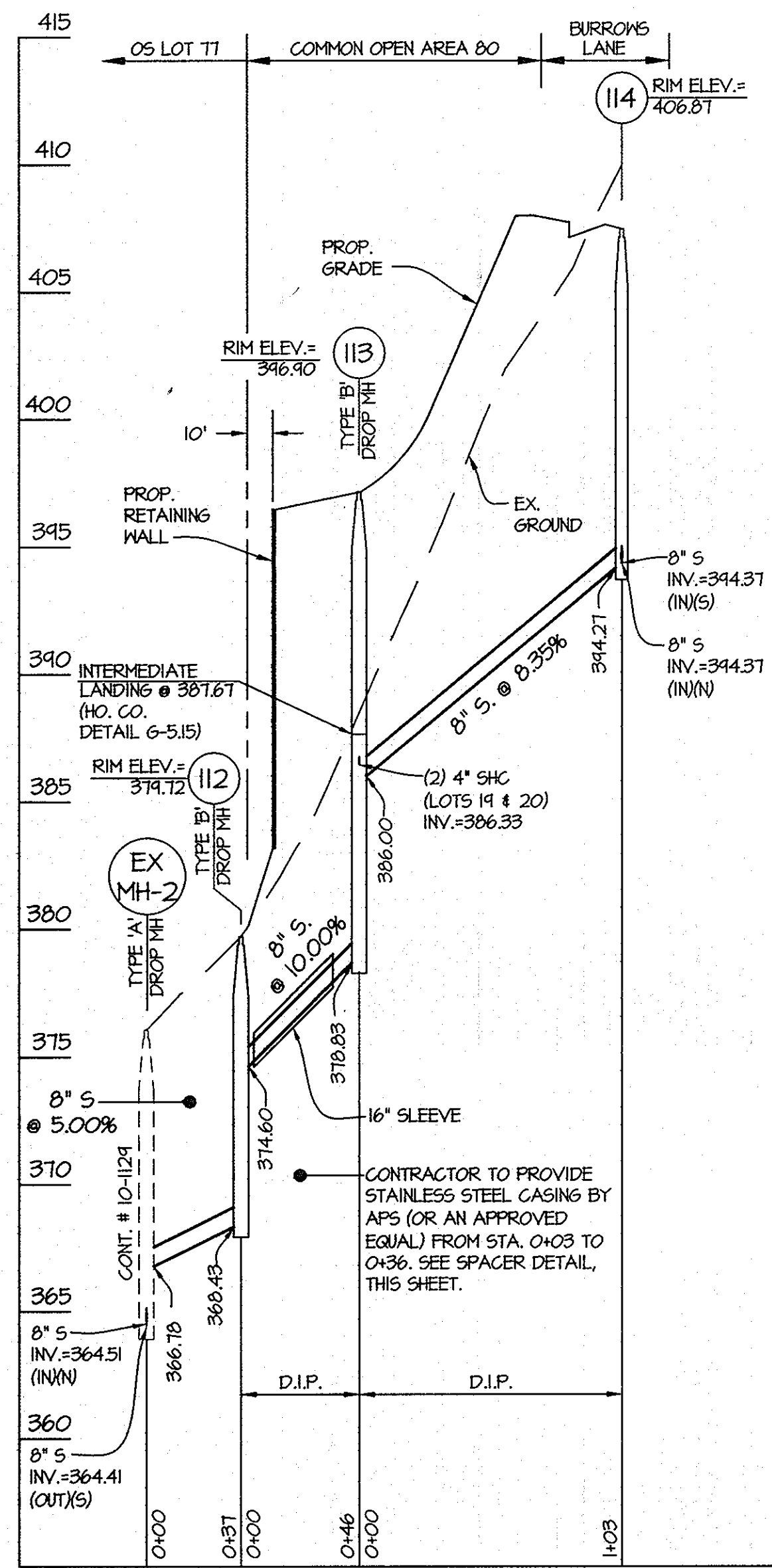
BY	NO	REVISION	DATE
SH	1	Rev. SHC's For Lots 59, 55, 57, 54, 60	10/17/11

WATER AND SEWER PROFILES  
600' SCALE MAP NO. 17 BLOCK NO. 18/24

**ROGERS PROPERTY**  
CONTRACT No. 14-4607-D  
LOTS 1 THROUGH 68,  
OPEN SPACE LOTS 69 THROUGH 77, AND  
COMMON OPEN AREAS 78 THROUGH 80  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6

SCALE AS SHOWN  
SHEET 4 OF 6

L:\CADD\DRAWINGS\66079\HW\FINAL\06079MS04-05.dwg DES. DEV DRN. AWL CHK. DEV



- NOTES:
1. MATERIAL AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE W/ SPECIFICATION SECTION 963 AND 1012.
  2. CASING SPACER/INSULATORS SHALL BE AS SPECIFIED OR AS APPROVED BY THE COUNTY FOR INSERTING, SUPPORTING, SPACING AND INSULATING THE 8" D.I.P.
  3. A MINIMUM OF 3 SPACER/INSULATORS PER PIPE LENGTH SHALL BE SPACED PER MANUFACTURER'S RECOMMENDATIONS FOR THE 16" CASING AND 8" D.I.P.
  4. A JOINT IN THE 8" D.I.P. SHALL BE PROVIDED WITHIN 2' OF EACH OUTSIDE END OF CASING.

FOR WATER AND SEWER PLAN VIEW SEE SHEETS 2 AND 3

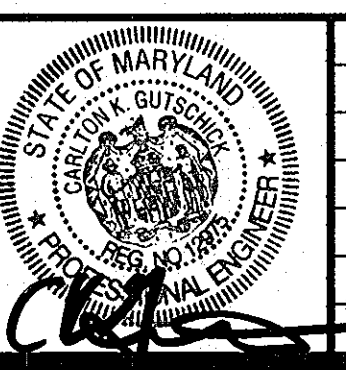
PREPARED FOR:  
G&R ROGERS DEVELOPMENT  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: CHARLIE O'DONOVAN  
410-484-8400

DEPARTMENT OF  
PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
  
Steve C. Gorman  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF  
PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
  
W. J. D. ...  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

GLWGUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
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TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-289-2524 FAX: 301-421-4186

DATE  
MAY, 2010  
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



REV.	NO.	REVISION	DATE
01	1	Rev. CHCS For Lots 41-43, 45, 78 & 49	10/17/11

WATER AND SEWER  
PROFILES  
600' SCALE MAP NO. 17 BLOCK NO. 18/24

ROGERS PROPERTY  
CONTRACT No. 14-4607-D  
LOTS 1 THROUGH 68,  
OPEN SPACE LOTS 69 THROUGH 77, AND  
COMMON OPEN AREAS 78 THROUGH 80  
HOWARD COUNTY, MARYLAND  
ELECTION DISTRICT No. 6

SCALE  
AS SHOWN  
SHEET  
5 OF 6

