

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER MAIN	1262 L.F.	1267 L.F.	CL-54	GRIFFIN/BELAR RD SUPPLY
6" WATER	30 L.F.	30 L.F.	CL-54	GRIFFIN/B.R.S.
1" W.H.C.	2150 L.F.	2170 L.F.	TYPE 'K'	READING/B.R.S.
1-1/4" THIN W.H.C.	21 L.F.			
8" x 8" TEE	2 EA.	2 EA.	CL-350 D.I.P.	SIGMA/B.R.S.
8" x 1/2" H.B.	10 EA.	10 EA.	CL-350 D.I.P.	SIGMA/B.R.S.
8" x 3/4" H.B.	3 EA.	3 EA.	CL-350 D.I.P.	SIGMA/B.R.S.
8" x 1/2" H.B.	1 EA.	1 EA.	CL-350 D.I.P.	SIGMA/B.R.S.
8" x 6" F.H.T.	1 EA.	1 EA.	CL-350 D.I.P.	SIGMA/B.R.S.
8" VALVE	3 EA.	3 EA.	RESISTANT	MUELLER/B.R.S.
6" VALVE	1 EA.	1 EA.	RESISTANT	MUELLER/B.R.S.
FIRE HYDRANT	1 EA.	1 EA.	GRANT/SON	MUELLER/B.R.S.
8" SEWER MAIN (D.I.P.)	190 L.F.			
8" SEWER MAIN	1631 L.F.	1,631 L.F.	SOR-35 PVC	J.M. EAGLE/B.R.S.
4" SHC	2354 L.F.	2,354 L.F.	SOR-35 PVC	J.M. EAGLE/B.R.S.
4" MANHOLE	18 EA.	18 EA.	PRECAST	CONTRACTORS PRECAST CORP.
TYPE B DROP CONNECTION	2 EA.	2 EA.	CONSTRUCTED	IN FIELD

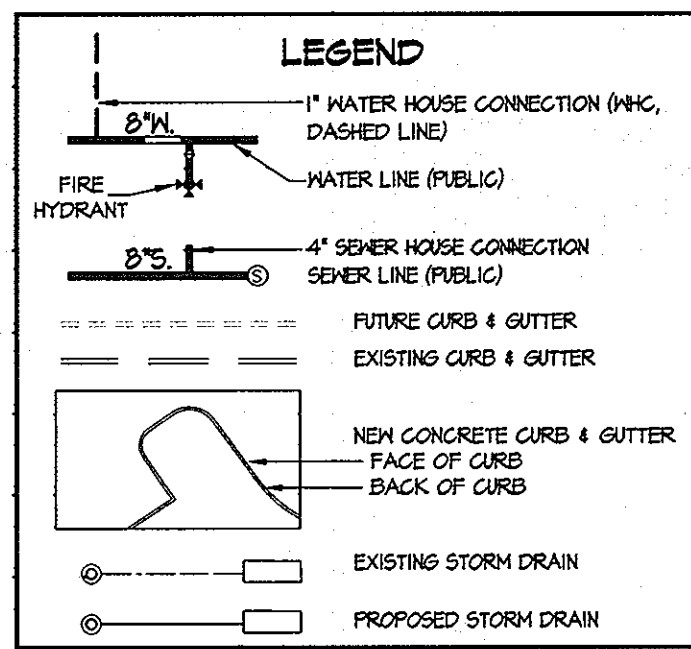
NAME OF UTILITY CONTRACTOR: BOSLEY CONSTRUCTION INC./REESTERS TOWN, MD.

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

- NOTES:**
1. ALL WATER HOUSE CONNECTIONS TO BE 1" WITH 1/2" INSIDE METER, UNLESS NOTED OTHERWISE, SEE HO. CO. STD. DETAIL W3.21.
  2. WATER HOUSE CONNECTIONS FOR LOTS D-44 & D-45 TO BE 1" TWIN W.H.C. SEE HO. CO. STD. DETAIL W3.23.
  3. WATER HOUSE CONNECTIONS FOR LOTS D-56 THRU D-62 & D-102 THRU D-108 ARE FRONT LOADED GARAGE UNITS. ALL VALVE BOXES SHALL BE IN ACCORDANCE WITH HO. CO. STD. DETAIL G-9.01.

- SHEET INDEX**
- 1) TITLE SHEET
  - 2) WATER and SEWER EXTENSION PLAN
  - 3) WATER and SEWER EXTENSION PROFILES

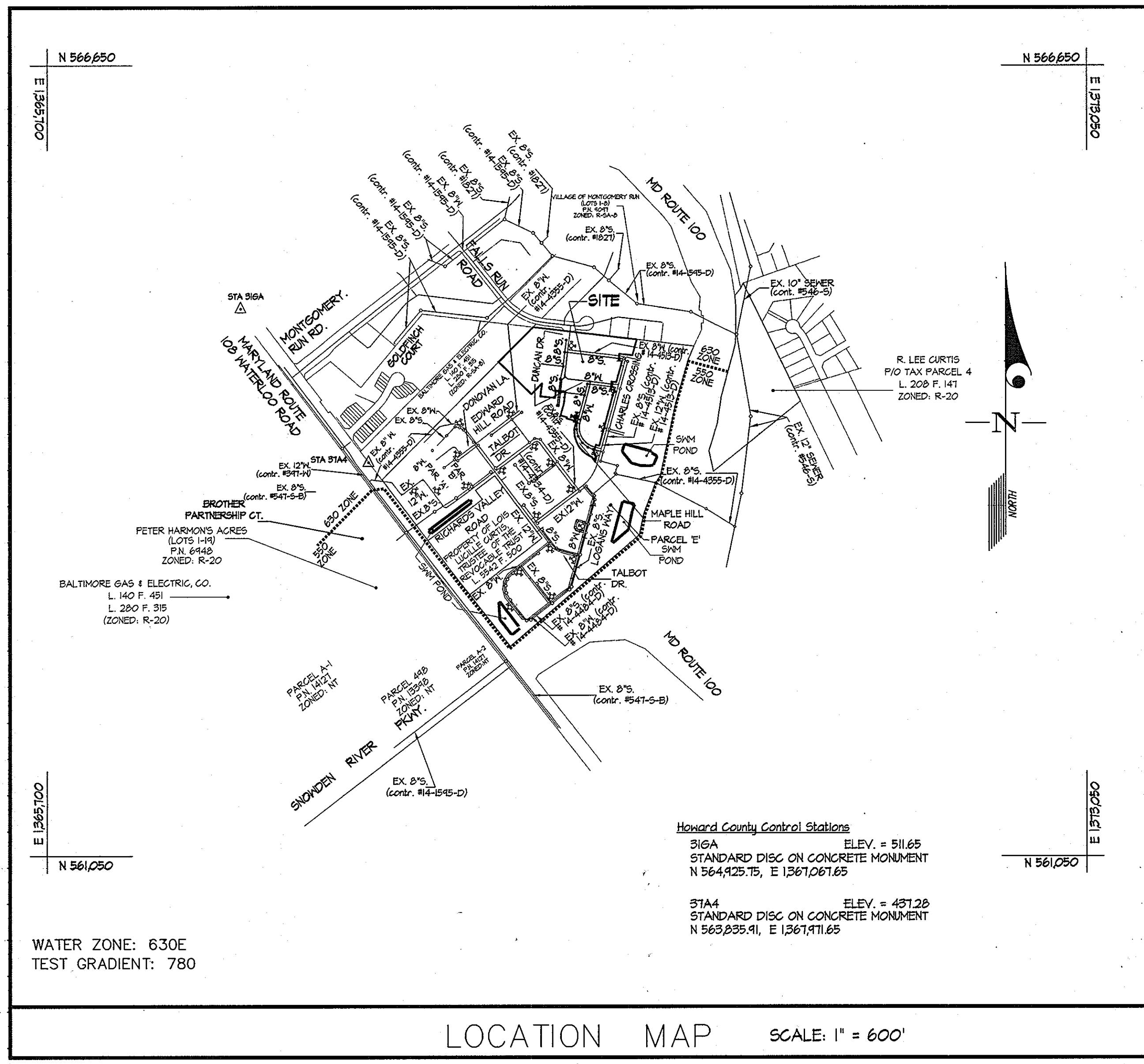
- NOTE:**
1. NON-BUILDABLE PARCEL D-73 IS SHOWN AS LOTS D-91 THRU D-101 FOR PLANNING PURPOSES.
  2. NON-BUILDABLE PARCEL D-74 IS SHOWN AS FUTURE LOTS D-81 THRU D-84 & OPEN SPACE LOT D-70 FOR PLANNING PURPOSES.
  3. NON-BUILDABLE PARCEL D-75 IS SHOWN AS FUTURE LOTS D-85 THRU D-90 FOR PLANNING PURPOSES.
  4. NON-BUILDABLE PARCEL D-76 IS SHOWN AS LOTS D-91 THRU 96 FOR PLANNING PURPOSES.
  5. NON-BUILDABLE PARCEL D-77 IS SHOWN AS LOTS D-102 THRU 109 FOR PLANNING PURPOSES.
  6. NON-BUILDABLE PARCEL D-78 IS SHOWN AS LOTS D-118 THRU D-123 & OPEN SPACE LOT D-132 FOR PLANNING PURPOSES.
  7. NON-BUILDABLE PARCEL D-79 IS SHOWN AS LOT D-110 THRU D-117 FOR PLANNING PURPOSES.
  8. SHC AND W.H.C. FOR LOT C-226 (NOT SHOWN) HAS BEEN PROVIDED UNDER PHASE III WATER & SEWER, (CONTR. # 14-4484-D).
  9. SHC'S AND W.H.C.'S FOR LOTS D-5 THRU D-17 HAVE BEEN PROVIDED UNDER PHASE IV WATER & SEWER, (CONTR. # 14-4513-D).
  10. THERE ARE 54 PHASE V LOTS (TOTAL).



Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Drawings Plan F-10-048; Drawings for Sediment & Erosion Control.

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

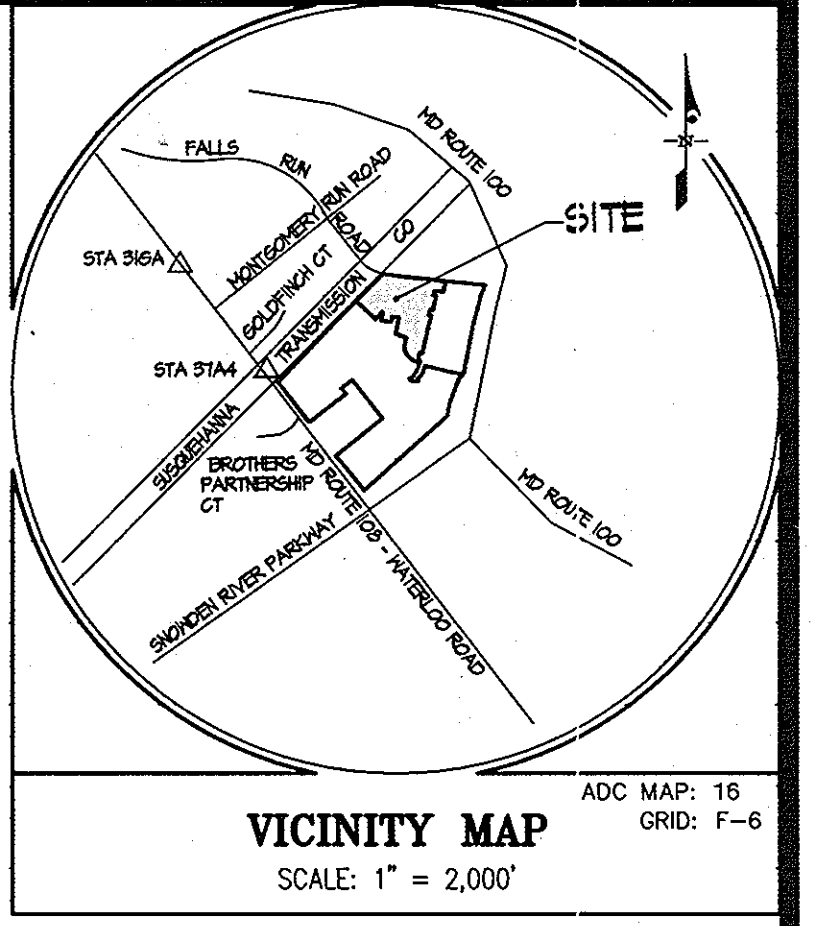
APPROVED: *John R. Roberts* 5/2/10  
HOWARD S.C.D. DATE



CONTRACT No. 14-4609-D  
**SHIPLEY'S GRANT - PHASE V**  
 ▲ LOTS D-135 thru D-149 &  
 LOTS C-226, D-5 THRU D-55 AND OPEN SPACE LOTS D-63 THRU D-68  
 COMMON OPEN SPACE LOTS D-69 THRU D-72  
 AND NON-BUILDABLE PARCELS D-73 THRU D-80  
**SHIPLEY'S GRANT - PHASE I**  
 OPEN SPACE LOT C-64

HOWARD COUNTY, MARYLAND  
 DEPARTMENT OF PUBLIC WORKS

TYPE OF BUILDING	RESIDENTIAL
NUMBER OF UNITS	88 UNITS + 1 BULK PARCEL
NUMBER OF S.H.C.'s	88-4" SHC'S + 1 8" CONN. (FUTURE EXT.)
NUMBER OF W.H.C.'s	86-1" W.H.C.'s / 1-1" TWIN W.H.C.
AREA OF COMMERCIAL LOT/PARCEL	1.9 AC.
SEWER SHED	DORSEY - PATAPSCO
PUMPING STATION	PATAPSCO WASTEWATER TREATMENT PLANT



- GENERAL NOTES**
- PART I**
1. 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.
  2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED BY MCKENZIE SYNDER, INC. DATED 5/23/03.
  3. HORIZONTAL AND VERTICAL SURVEY CONTROLS:
- THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 316A, AND NO. 31A4.
4. ALL VERTICAL CONTROLS ARE BASED ON NAVD 83. VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE NGVD 29.
  5. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
  6. 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 THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
  7. 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.
  8. 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.
  9. 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               | 410-313-4400                  |
| COLONIAL PIPELINE CO.             | 410-745-1340                  |
| MISS UTILITY                      | 1-800-251-TTTT                |
| STATE HIGHWAY ADMINISTRATION      | 410-531-5533                  |
| VERIZON                           | 1-800-743-0033 / 410-224-4210 |
10. 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.
  11. 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.
  12. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-313-7480 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 DFN REQUIREMENTS PER SECTION 18.14(g) OF THE HOWARD COUNTY CODE.
- PART II - WATER**
1. ALL MAINS SHALL BE D.I.P. CLASS 54 UNLESS OTHERWISE NOTED.
  2. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
  3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
  4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  5. 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.
  6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  7. ALL WATER HOUSE CONNECTIONS SHALL BE 1" WITH 1/2" INSIDE METER SETTING UNLESS NOTED OTHERWISE.
- PART III - SEWERS**
1. ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
  2. ALL SHC TO BE 4" P.V.C. @ 2% UNLESS OTHERWISE NOTED.
  3. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
  4. FORCE MAINS SHALL BE D.I.P. ONLY.
  5. MANHOLES SHOWN WITH THE 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
  6. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
  7. HOUSE(S) WITH THE SYMBOL 'C.N.S.' INDICATES THE CELLAR CANNOT BE SERVED.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Steve Cline* 5/2/10  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

*John J. Williams* 6/7/10  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3809 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20886  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE: APRIL, 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. 14931  
 EXP. DATE: MAY 21, 2012

*Michael J. Gutschick*  
 PROFESSIONAL ENGINEER

BY	NO	REVISION	DATE
WJ	1	Rev. Title & Title Block	10/20/09
KCT	2	AS-BUILT	5/27/13

TITLE SHEET

600' SCALE MAP NO. 37 BLOCK NO. 1&2

**SHIPLEY'S GRANT - PHASE V**  
 Lots C-226, D-5 thru D-55, Open Space Lots D-63 thru D-68  
 Common Open Space Lots D-69 thru D-72 and Non-Buildable  
 Parcels "D-73" thru "D-80" and  
 Shipley's Grant - Phase I  
 Open Space Lot C-64  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 1

SCALE: AS SHOWN  
 SHEET: 1 OF 4

PREPARED FOR:  
 BA WATERLOO, LLC.  
 66 BOZUTTO HOMES, INC.  
 7850 WALKER DRIVE GREENBELT, MD 20770  
 ATTN: DUNCAN SLIDELL  
 301-623-1525

I, GARY BRANNING, DESIGNER, IN CHARGE, HAVE REVIEWED THESE PLANS AND SPECIFICATIONS AND AM SATISFIED THAT THEY COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR THESE PLANS. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR THESE PLANS. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR THESE PLANS.

MINIMUM CELLAR ELEVATIONS		INV. @ R/W/ESMT. ELEVATION
LOT NO.	ELEVATION	
DUNCAN DRIVE		
D-18	401.90	404.18
D-19	401.41	404.33
D-20	401.25	404.11
D-21	401.00	404.81
D-22	406.18	409.66
D-23	406.51	409.43
MAPLE HILL ROAD		
D-24	409.62	402.74
D-25	404.32	401.44
D-26	403.12	400.24
D-27	402.12	398.24
D-28	401.12	396.24
D-29	400.12	394.24
D-30	394.12	396.24
D-31	394.48	392.10
D-32	394.46	391.42
D-33	394.36	391.54
D-34	394.31	391.53
D-35	400.10	391.18
D-36	401.00	398.08
D-37	402.00	399.08
D-38	403.10	400.18
D-39	404.10	401.18
D-40	403.18	402.88
DUNCAN DRIVE		
D-41	406.53	409.51
D-42	408.26	409.40
D-43	406.44	409.52
D-44	406.51	409.54
D-45	406.20	409.33
D-46	401.00	404.08
D-47	401.51	404.45
D-48	401.58	404.66
D-49	401.12	404.80
D-50	401.80	404.88
CHARLES CROSSING		
D-51	420.61	417.18
D-52	420.61	417.14
D-53	420.08	417.04
D-54	418.82	416.88
D-55	419.59	416.65
D-192	421.45	418.14
D-193	420.24	417.62
D-194	420.21	417.40
D-195	420.45	417.18
D-196	420.23	416.96
D-197	420.01	416.74
D-198	419.76	416.44
D-199	419.21	416.31
D-200	419.66	416.10
D-201	419.35	415.74
D-202	419.23	415.61
D-203	419.00	415.44
D-204	419.40	416.13
D-205	419.16	415.84
D-192	418.12	415.45
D-193	418.50	415.25
D-194	418.28	415.01
D-195	418.06	414.74
D-196	417.81	414.54
DUNCAN DRIVE		
D-206	409.21	408.54
D-207	404.15	409.88
D-208	408.58	408.31
D-209	408.20	404.43
D-210	406.96	409.64
D-211	406.84	402.51
COMMON OPEN SPACE LOT D-70		
D-212	410.12	407.16
D-213	409.62	406.10
D-214	409.12	405.20
D-215	408.62	405.10
D-216	408.12	405.20
OPEN SPACE LOT C-64		
D-217	394.01	396.74
D-218	401.26	391.94
D-219	402.26	398.94
D-220	403.58	400.08
D-221	404.58	401.11
D-222	405.51	402.30
D-223	408.34	409.01
D-224	404.24	405.91
D-225	410.05	408.18
D-226	410.16	407.28
D-227	411.20	407.95
D-228	411.86	409.54
D-229	412.52	404.25
D-230	413.53	410.26
D-195	422.80	419.20

LOT FRONTAGE TABLE	
LOT No.	DISTANCE (feet)
DUNCAN DRIVE	
D-18	36.53'
D-19	22.33'
D-20	22.33'
D-21	22.23'
D-22	22.23'
D-23	35.35'
MAPLE HILL ROAD	
D-24	21.00'
D-25	20.00'
D-26	16.00'
D-27	16.00'
D-28	20.00'
D-29	25.00'
D-30	25.00'
D-31	20.11'
D-32	16.48'
D-33	11.20'
D-34	32.14'
D-35	23.00'
D-36	20.00'
D-37	20.00'
D-38	20.00'
D-39	30.22'
D-40	30.22'
DUNCAN DRIVE	
D-41	21.00'
D-42	20.00'
D-43	16.00'
D-44	16.00'
D-45	30.00'
D-46	21.00'
D-47	21.00'
D-48	16.00'
D-49	16.00'
D-50	33.50'
CHARLES CROSSING	
D-51	24.18'
D-52	20.00'
D-53	20.00'
D-54	20.00'
D-55	21.00'
DUNCAN DRIVE	
D-101	21.00'
D-102	20.00'
D-103	20.00'
D-104	20.00'
D-105	20.00'
D-106	21.00'
D-107	21.00'
D-108	21.00'
D-109	21.00'
D-110	21.00'
D-111	21.00'
D-112	21.00'
D-113	21.00'
D-114	21.00'
D-115	21.00'
D-116	21.00'
D-117	21.00'
D-118	21.00'
D-119	21.00'
D-120	21.00'
D-121	21.00'
D-122	21.00'
D-123	21.00'
D-124	21.00'
D-125	21.00'
D-126	21.00'
D-127	21.00'
D-128	21.00'
D-129	21.00'
D-130	21.00'
D-131	21.00'
D-132	21.00'
D-133	21.00'
D-134	21.00'
D-135	21.00'
D-136	21.00'
D-137	21.00'
D-138	21.00'
D-139	21.00'
D-140	21.00'
D-141	21.00'
D-142	21.00'
D-143	21.00'
D-144	21.00'
D-145	21.00'
D-146	21.00'
D-147	21.00'
D-148	21.00'
D-149	21.00'
D-150	21.00'

**FITTING INFORMATION**  
WATERLINE (MAPLE HILL ROAD)

LOCATION	FITTING	STATION	OFFSET
1	8" HB	STATION	9.3' RIGHT
2	8" HB	STATION	9.4' RIGHT
3	8" HB	STATION	9.5' RIGHT
4	8" HB	STATION	9.5' RIGHT
5	8" HB	STATION	9.5' RIGHT
6	8" HB	STATION	9.5' RIGHT
7	8" HB	STATION	9.5' RIGHT
8	8" HB	STATION	9.5' RIGHT
9	8" HB	STATION	9.5' RIGHT
10	8" HB	STATION	10.0' RIGHT
11	FIRE HYDRANT	STATION	20.1' LEFT
12	8" HB	STATION	10.0' RIGHT

**FITTING INFORMATION**  
WATERLINE (DUNCAN DRIVE)

LOCATION	FITTING	STATION	OFFSET
13	8" x 8" T.	STA. 2+10	10.0' RIGHT
14	8" HB	STA. 3+12	9.6' RIGHT
15	8" HB	STA. 3+80	10.3' RIGHT
16	8" HB	STA. 3+41	10.8' RIGHT
17	8" x 8" T.	STA. 4+02	10.5' RIGHT
18	8" HB	STA. 4+08	9.4' RIGHT
19	8" HB	STA. 4+17	9.2' RIGHT
20	8" HB	STA. 3+49	20.3' LEFT

**FITTING INFORMATION**  
OPEN SPACE LOT C-64

LOCATION	FITTING	NORTH	EAST
21	8" CAP	564.232	1364.317

**SEWER MANHOLE LOCATIONS**  
(MAPLE HILL ROAD)

MH No.	STATION	OFFSET
1	0+64	9.0' LEFT
2	1+02	9.4' LEFT
3	1+50	10.8' LEFT
4	2+01	10.0' LEFT
5	2+49	10.0' LEFT
6	2+92	9.5' LEFT
7	4+94	9.0' LEFT

**SEWER MANHOLE LOCATIONS**  
(DUNCAN DRIVE)

MH No.	STATION	OFFSET
8	2+27	9.0' LEFT
9	0+53	9.0' LEFT
10	4+03	24.1' LEFT
11	4+21	9.0' LEFT
12	5+23	9.0' LEFT
13	6+69	9.0' LEFT

**SEWER MANHOLE LOCATIONS**  
(CHARLES CROSSING)

MH No.	STATION	OFFSET
14	1+23	9.0' LEFT

**SEWER MANHOLE LOCATIONS**  
COMMON OPEN SPACE LOT D-70

MH No.	NORTH	EAST
15	564.534	1364.206

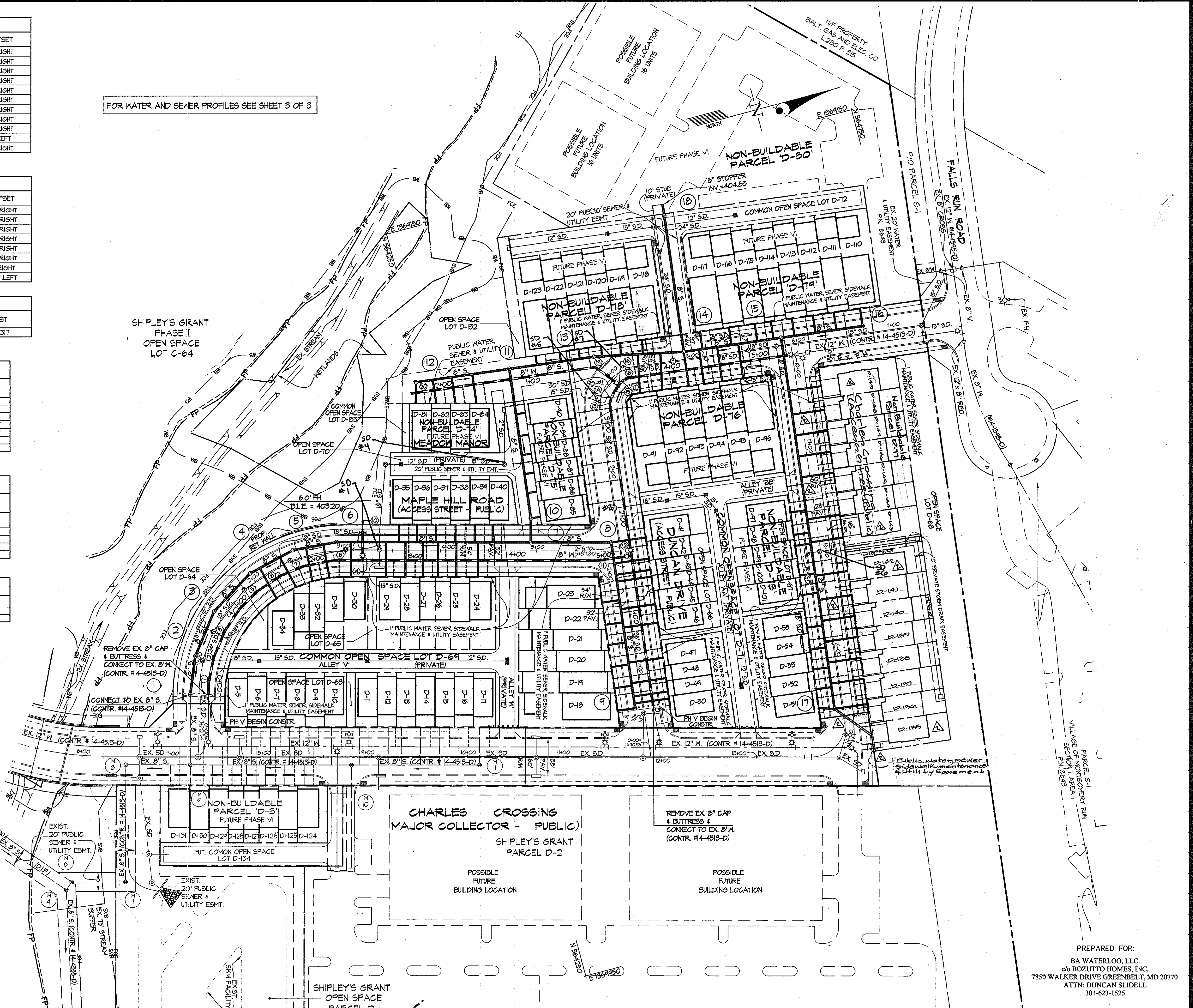
**SEWER MANHOLE LOCATIONS**  
OPEN SPACE LOT C-64

MH No.	NORTH	EAST
11	564.331	1364.318
12	564.240	1364.301

**SEWER MANHOLE LOCATIONS**  
COMMON OPEN SPACE LOT D-70

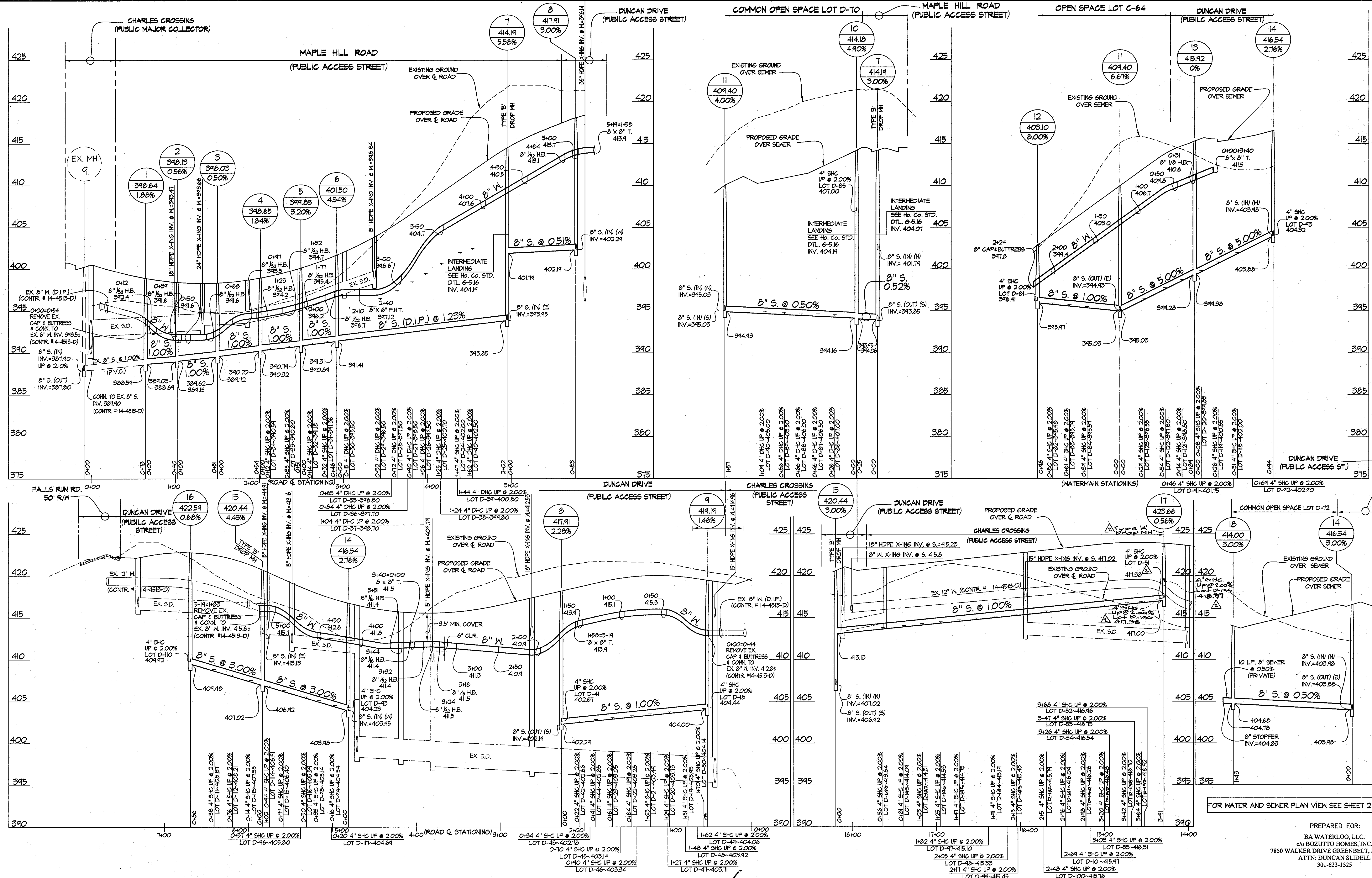
MH No.	NORTH	EAST
10	564.318	1364.414

FOR WATER AND SEWER PROFILES SEE SHEET 3 OF 3



PREPARED FOR:  
BA WATERLOO, LLC.  
66 BOZUTTO HOMES, INC.  
7850 WALKER DRIVE GREENBELT, MD 20770  
ATTN: DUNCAN SLIDELL  
301-623-1525

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities Date: 5/21/10	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division Date: 6/11/10	<b>GLWGUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND-PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20886 TEL: 301-421-4024 BALT. 410-880-1820 DC/VA 301-989-2524 FAX: 301-421-4186	DATE: APRIL, 2010 G.L.W. No. 03006 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. 14931 EXP. DATE: MAY 21, 2012	WATER and SEWER EXTENSION PLAN 600' SCALE MAP NO. 37 BLOCK NO. 1&2 ZONING: R-A-15 CONTRACT NO. 14-4609-D TAX MAP 37, B-1	SCALE: 1"=50' SHEET: 2 OF 4
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FOR WATER AND SEWER PLAN VIEW SEE SHEET 2 OF 3

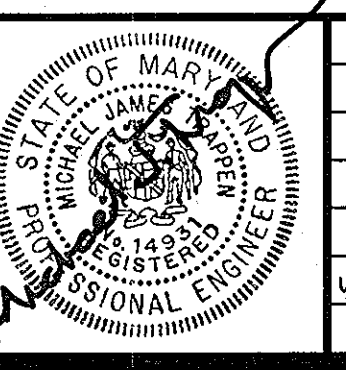
PREPARED FOR:  
 BA WATERLOO, LLC.  
 c/o BOZZITTO HOMES, INC.  
 7850 WALKER DRIVE GREENBELT, MD 20770  
 ATTN: DUNCAN SLIDELL  
 301-623-1525

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Chief, Bureau of Utilities  
 5/2/10

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: 301-889-2524 FAX: 301-421-4186

DATE APRIL, 2010  
 G.L.W. No. 03006  
 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. 14931  
 EXP. DATE: MAY, 21, 2012



BY	NO	REVISION	DATE

WATER and SEWER EXTENSION PROFILES  
 60' SCALE MAP NO. 37 BLOCK NO. 1&2  
 ZONING: R-A-15 CONTRACT NO. 14-4609-D TAX MAP 37, B-1

**SHIPLEY'S GRANT - PHASE V**  
 Lots C-226, D-5 thru D-65, Open Space Lots D-65 thru D-68  
 Common Open Space Lots D-69 thru D-72 and Non-Buildable  
 Parcels "D-73" thru "D-80" and  
 Shipley's Grant - Phase I  
 Open Space Lot C-64  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT No. 1  
 DUNCAN SLIDELL  
 CONTRACT NO. 14-4609-D TAX MAP 37, B-1

SCALE AS SHOWN  
 SHEET 3 OF 4

L:\CADD\WORKING\03006\Phase V\05-PUB-WAT-SEW\FINAL\_MDS\03006-PWS-CG-PROF.dwg  
 PLOTED: 4/22/2010 8:53 AM, LAST SAVED: 4/22/2010 8:49 AM, PLOTTED BY: Mike Hopson

SHIPLEY'S GRANT V 14-4609-D

LOT	FROM	TO	FEET	TO	FEET
34	SHC	SH-4	40	S-5	54
34	MHC		44.5		45
33	SHC	S-4	51	S-5	34.5
33	MHC		55.5		35
32	SHC	S-4	65	S-5	38.5
32	MHC		74		43
31	SHC	S-4	83	S-5	48
31	MHC		90.5		54.5
30	SHC	S-6	40.5	S-5	66
30	MHC		44		81
24	SHC	S-6	64	FIRE HYDRANT	52
24	MHC		71.5		57
23	SHC	S.D. MH #1	54	FIRE HYDRANT	64
23	MHC	MH-65	47		72
27	SHC	MH-65	53	FIRE HYDRANT	78
27	MHC		61		85.5
26	SHC	S-7	102	FIRE HYDRANT	41
26	MHC		94		100
25	SHC	MH-65	85	S-7	85.5
25	MHC		45		76
24	SHC	MH-65	107	S-7	66
24	MHC		117.5		58
35	SHC	MH-65	35	S-7	154
35	MHC		41.5		124
36	SHC	MH-65	49	S-7	120.5
36	MHC		56		111.5
37	SHC	MH-65	65	S-7	101
37	MHC		74		91
38	SHC	MH-65	83.5	S-7	81
38	MHC		93		72
24	SHC	MH-65	103.5	S-7	63.5
24	MHC		113		53
40	SHC	MH-65	121	S-7	46
40	MHC		133		36
41	SHC	S-8	34.5	S.D. #2	37.5
41	MHC		34		44
42	SHC	S-8	34	MH - 41	62
42	MHC		43		62
43	SHC	S-8	45.5	MH - 41	65
43	MHC		50.5		73
44	SHC	S-8	66	MH - 41	42.5
44	MHC		56		80
45	SHC	S-8	68	MH - 41	95
45	MHC		78		107
46	SHC	S-8	88	MH - 41	117
46	MHC		96.5		126
47	SHC	S-4	66	S.D. #3	68.5
47	MHC		58		54
48	SHC	S-4	44	MH - 40	43
48	MHC		44		43
44	SHC	S-4	41	MH - 40	40
44	MHC		36.5		33.5
50	SHC	S-4	55		51
50	MHC		55		51
23	SHC	S-8	48	MH - 41	81
23	MHC		55		89
22	SHC	S-8	78	MH - 41	111
22	MHC		88		121
21	SHC	S-8	98	MH - 41	131
21	MHC		108		141
20	SHC	S-4	57.5	MH - 40	65
20	MHC		48.5		55
14	SHC	S-4	38	MH - 40	34
14	MHC		31		34
18	SHC	S-4	23.5	MH - 40	33
18	MHC		20		26
117	SHC	S-14	35.5	S-15	75
117	MHC		26		85
116	SHC	S-14	61	S-15	47
116	MHC		52		56
115	SHC	S-14	88	S-15	23
115	MHC		78		30
114	SHC	S-14	106	S-15	17
114	MHC		95		19
115	SHC	EX FIRE HYDRANT	51.5	S-15	51.5
115	MHC		56.5		21
112	SHC	EX FIRE HYDRANT	47.5	S-15	47.5
112	MHC		48		38
111	SHC	EX FIRE HYDRANT	51.5	S-15	68
111	MHC		47		58.5
110	SHC	EX FIRE HYDRANT	47	S-15	44.5
110	MHC		60		86
118	SHC	S-13	65	S.D. #7	43
118	MHC		53.5		36
114	SHC	S-13	40	MH - 43	28
114	MHC		31		25
120	SHC	S-13	21	MH - 43	27
120	MHC		14.5		31.5
121	SHC	S-13	11	MH - 43	42
121	MHC		16		44
122	SHC	S-13	25.5	MH - 43	53.5
122	MHC		32.5		69
123	SHC	S-13	44	MH - 43	81.5
123	MHC		38		90
81	SHC	S-12	25	S-11	42.5
81	MHC		21.5		102.5
82	SHC	S-12	38	S-11	75.5
82	MHC		30		82.5
83	SHC	S-12	55	S-11	57
83	MHC		48.5		65
84	SHC	S-12	76.5	S-11	42
84	MHC		66.5		47.5

SHIPLEY'S GRANT V 14-4609-D

LOT	FROM	TO	FEET	TO	FEET
85	MHC	MH - 41	27	MH - 42	110.5
85	SHC	S - 10	16		68
86	MHC	MH - 41	34	MH - 42	90.5
86	SHC	S - 10	28		45
87	MHC	MH - 41	54.5	MH - 42	72
87	SHC	S - 10	48.5		32
88	MHC	MH - 41	73	MH - 42	53.5
88	SHC	S - 10	68		31
84	MHC	MH - 41	92	MH - 42	37
84	SHC	S - 10	88		42
90	MHC	MH - 41	106	MH - 42	24
90	SHC	S - 10	111.5		60
MAPLE HILL 2340	6" F.H. VALVE	F.H.	27	MH - 65	14
MAPLE HILL 2340	8" VALVE	S-8	24.5	MH - 41	51
DUNCAN DR. 1862	8" V	S-8	24.5	MH - 41	48.5
DUNCAN DR. 3455	8" V	S-13	35.5	S-14	74
51	MHC	S-17	14	MH - 14	152
51	SHC		16.5		162
52	MHC	S-17	65	MH - 14	133
52	SHC		74		145
53	MHC	S-17	83.5	MH - 14	114
53	SHC		93		124.5
54	MHC	S-17	103.5	MH - 14	43
54	SHC		113		102.5
55	MHC	S-17	121	MH - 14	71
55	SHC		133		81
104	MHC	EX FIRE HYDRANT	14	MH - 14	133.5
104	SHC		30		115
108	MHC	EX FIRE HYDRANT	42	MH - 14	148.5
108	SHC		52		148.5
107	MHC	EX FIRE HYDRANT	64	MH - 14	136.5
107	SHC		74.5		126
106	MHC	EX FIRE HYDRANT	85	MH - 14	115
106	SHC		96		105
105	MHC	EX FIRE HYDRANT	107.5	MH - 14	43.5
105	SHC		118.5		83
104	MHC	EX FIRE HYDRANT	128.5	MH - 14	73
104	SHC		134		64
103	MHC	EX FIRE HYDRANT	152	MH - 14	52
103	SHC		162		43.5
102	MHC	EX FIRE HYDRANT	176.5	MH - 14	33
102	SHC		187		27
97	MHC	EX FIRE HYDRANT	155.5	MH - 14	58.5
97	SHC		166		48
98	MHC	EX FIRE HYDRANT	177.5	MH - 14	38
98	SHC		187.5		31
94	MHC	EX FIRE HYDRANT	142.5	MH - 14	27
94	SHC		144		26
100	MHC	EX FIRE HYDRANT	215.5	MH - 14	26
100	SHC		227		33
101	MHC	EX FIRE HYDRANT	237.5	MH - 14	41
101	SHC		247		50
62	MHC	MH - 14	30	S-17	153.5
62	SHC		30.5		144
61	MHC	MH - 14	47	S-17	128.5
61	SHC		55.5		114
60	MHC	MH - 14	65.5	S-17	108
60	SHC		75		98
54	MHC	MH - 14	86	S-17	87
54	SHC		96.5		77
58	MHC	MH - 14	107	S-17	67.5
58	SHC		117.5		58
57	MHC	MH - 14	124	S-17	50
57	SHC		134		42.5
56	MHC	MH - 14	155	S-17	35.5
56	SHC		164.5		34

PLOTTED: 10:24:11 PM on Monday, April 01, 2013 - Exp.  
 FILE: M:\2012\2712893\Drawings\Twp01a\Twp01a.dwg  
 24x36.dgn

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  <i>Steve C. ...</i> CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND  <i>...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS <b>KCI TECHNOLOGIES</b> 936 RIDGEBROOK ROAD SHIRAZ, MARYLAND 21152 TELEPHONE: (410) 316-7800 FAX: (410) 316-7818	DATE 3/27/13	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. 22570 EXP. DATE: 12/27/13	KCI   AS-BUILT BY NO REVISION DATE	WATER and SEWER EXTENSION AS-BUILT 600' SCALE MAP NO. 37 BLOCK NO. 1&2	<b>SHIPLEY'S GRANT - PHASE V</b> Lots C-226, D-5 thru D-62, Open Space Lots D-63 thru D-68 Common Open Space Lots D-69 thru D-72 and Non-Buildable Parcels "D-73" thru "D-80" and Shipley's Grant - Phase I Open Space Lot C-64 HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 1 CONTRACT No. 14-4609-D	SCALE AS SHOWN SHEET 4 OF 4
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