

SHEET INDEX

NO.	TITLE
1	COVER SHEET
2	WATER EXTENSION PLAN
3	WATER PROFILES AND FITTINGS

# WATER AND SEWER EXTENSION - PHASE III LUTHERAN VILLAGE AT MILLER'S GRANT

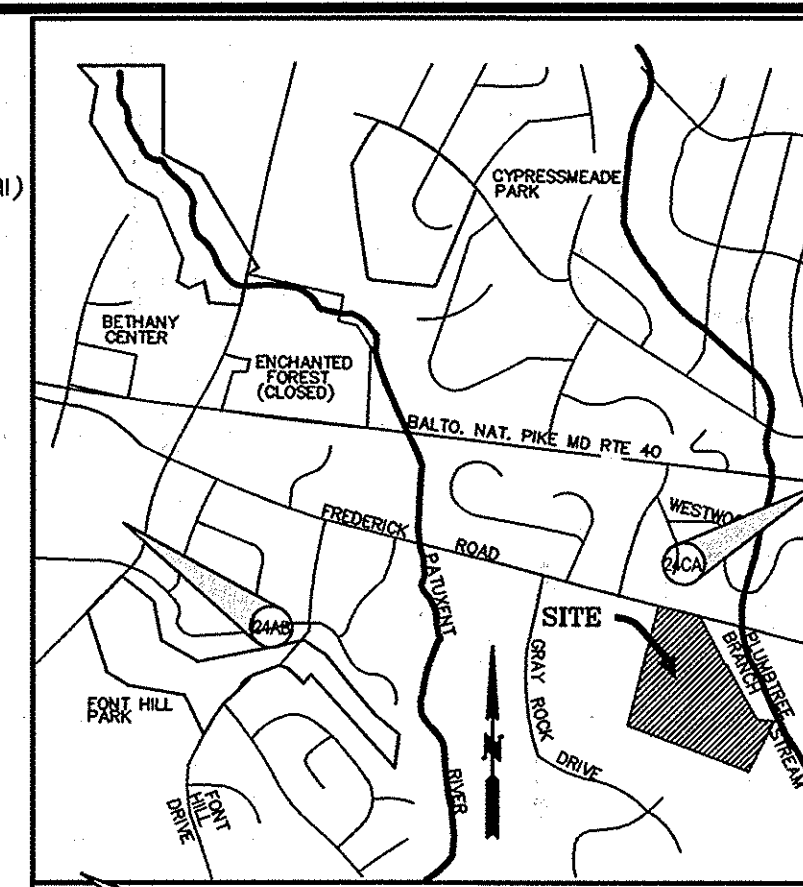
## 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4894-D

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
<b>WATER</b>				
8" WATER-C900 PVC DR-14	793 LF	793 L.F.	C900 PVC	NORTH AMERICAN PIPE
6" WATER-C900 PVC DR-14	50 LF	50 L.F.	C900 PVC	NORTH AMERICAN PIPE
8" x 8" TEE	1	1	DIP	TYLER UNION
8" x 6" TEE	0			
8" x 8" TS&V	0			
8" CAP & BUTTRISS	2	2	DIP	TYLER UNION
6" CAP & BUTTRISS	0			
6" VALVE	1	1	GATE VALVE	AFC
6" VALVE (FH)	3	3	GATE VALVE	AFC
8"x6" FHT	3	3	DIP	TYLER UNION
FIRE HYDRANT	3	3	HYDRANT	AFC
1-1/2" COPPER WMC	343 LF	343 L.F.	COPPER TUBING	CAMBRIDGE LEE
8" DIP WMC	0 LF			
1/8" VB	0			
1/32" VB	0			
2" 8" HDC	2	2	DIP	TYLER UNION
3" 8" HDC	2	2	DIP	TYLER UNION
5" 8" VERT. SWEEP	2	2	DIP	TYLER UNION
1/8" HB	1	1	DIP	TYLER UNION
1/16" HB	1	1	DIP	TYLER UNION
1/16" HB	0			
1/32" HB	2	2	DIP	TYLER UNION
5" 8" HORIZ. SWEEP	3	3	DIP	TYLER UNION
<b>SEWER</b>				
PUBLIC SEWER MANHOLES	1	1	PRECAST	CONTRACTORS PRECAST
8" PVC	10 LF	20 L.F.	C900 PVC	NORTH AMERICAN PIPE
CHECKBOX				
AS-BUILT DATE				
SURVEY AND DRAFTING DIVISION				

BENCHMARK

HORIZONTAL: MARYLAND NAD83 (ADJ 1991)  
 VERTICAL: NAVD83  
 GEODETIC SURVEY CONTROL: 24AB  
 NORTHING: 585836.919  
 EASTING: 195146.55  
 ELEVATION: 383.214  
 GEODETIC SURVEY CONTROL: 24CA  
 NORTHING: 585506.180  
 EASTING: 194644.29  
 ELEVATION: 398.336  
 GEODETIC SURVEY CONTROL: 24GC  
 NORTHING: 578668.853  
 EASTING: 195210.64  
 ELEVATION: 438.911  
 DESCRIPTIONS:  
 STAMPED DISC SET ON 3' DEEP COLUMN  
 OF CONCRETE



VICINITY MAP  
 SCALE 1"=2000'  
 HOWARD COUNTY MAP 11 GRID 9 J-K

GENERAL NOTES:

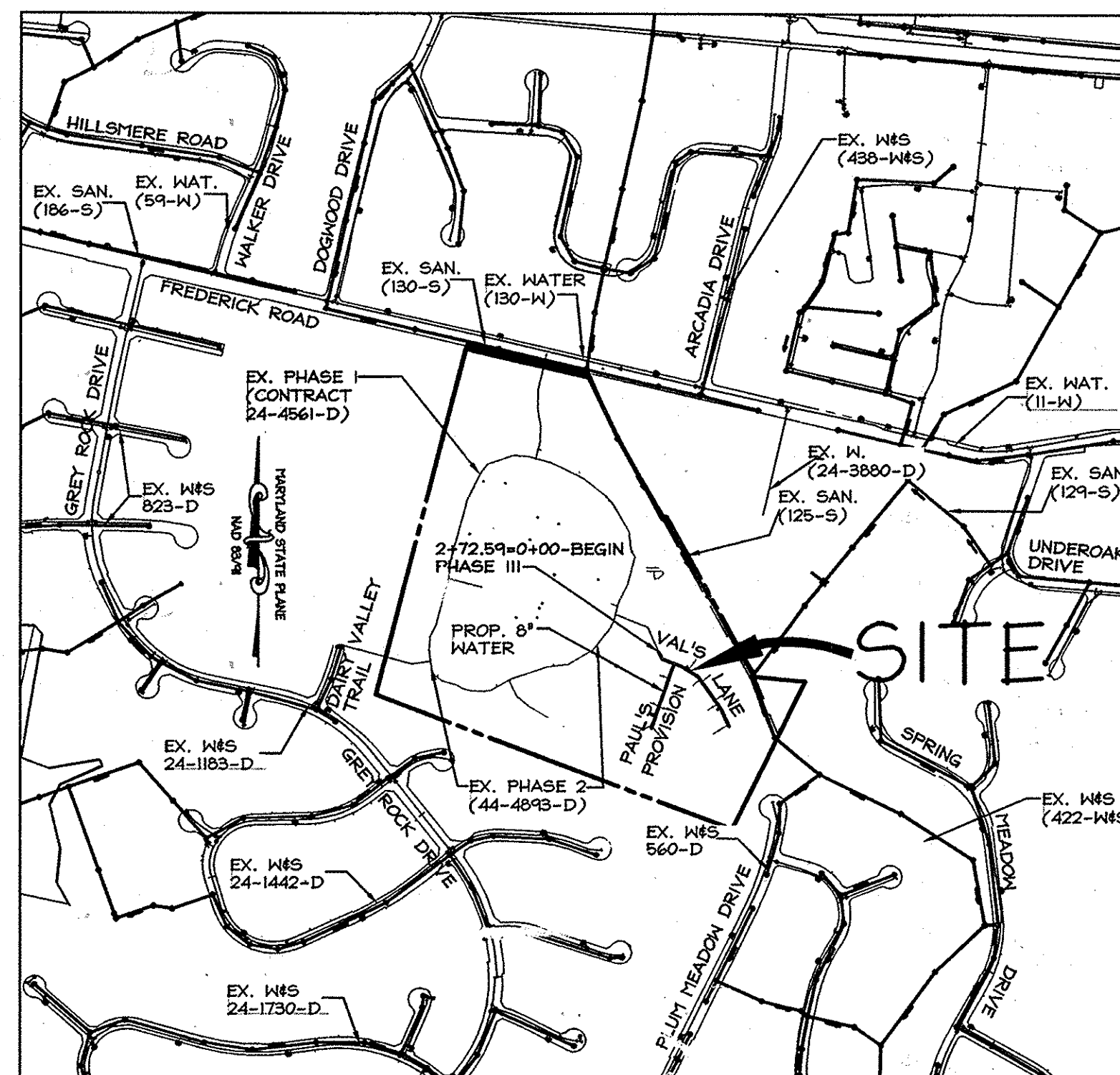
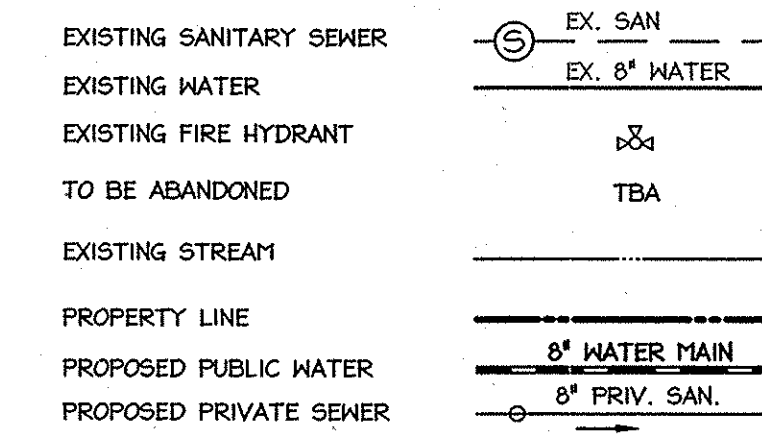
PART I

- 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 ON AUGUST 2005 BY christopher consultants, ltd.
- 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. 24AB, NO. 24CA, AND NO. 24GC. ALL VERTICAL CONTROLS ARE BASED ON NAVD '88.
- 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 CONTRACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THAT 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 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 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) ..... 410-850-4620  
 BGE (EMERGENCY) ..... 410-685-1400  
 BUREAU OF UTILITIES ..... 410-313-4900  
 COLONIAL PIPELINE CO. .... 410-795-1390  
 MISS UTILITY ..... 1-800-257-7777  
 STATE HIGHWAY ADMINISTRATION ..... 410-531-5533  
 VERIZON ..... 1-800-743-0033/410-224-9210
- TREES AND SHRUBS ARE TO BE PROTECTED TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT 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 DPW REQUIREMENTS PER SECTION 18.14 (A) OF THE HOWARD COUNTY CODE.

PART II WATER

- ALL WATER MAINS SHALL AWWA C900 PVC DR-14.
- TOPS OF ALL WATER MAINS SHALL HAVE 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 10.04 AND SECTION 10.05 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- TRACER WIRES AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. THE PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METAL FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTIONS. SEVENTEEN (17) POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. TWELVE (12) POUND ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL TEES USED WITH PVC MAINS SHALL BE DUCTILE IRON.
- PROPER ASSEMBLY OF GASKETED PIPE JOINTS: THE MANUFACTURER'S INSTRUCTION MANUAL SHALL BE OBTAINED AND READ. INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINTS, THE INSERTION LINE SHALL REMAIN VISIBLE. DUEL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF THE PVC PIPE.
- ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED. WHERE HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE PERMITTED, THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20-FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP. THE CONTRACTOR SHALL USE A VIBRATORY PLATE COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE #57 STONE ON BOTH SIDES OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP. TAKING CARE NOT TO USE COMPACTOR EQUIPMENT DIRECTLY OVER THE FITTING. PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1.5-DEGREE ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM 200 PSI MEETING THE REQUIREMENTS OF AWWA C900, SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL. FIVE DEGREE SWEEPS SHALL BE BELL BY PIGGOT, RATED FOR A MINIMUM 225 PSI, DR18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (IPEX) BLUE BRUTE DR18 OR EQUAL.
- WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA C-900 PVC PIPELINES, THE CONTRACTOR SHALL INSTALL DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5 DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AND EXPANSION RETENTION SPRING TO ALLOW FOR THE PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL.
- FOR THE FIRE SPRINKLER CODE, FOR SINGLE FAMILY DWELLINGS, THE MINIMUM REQUIREMENT IS A 1-1/2" WMC WITH A 1" METER OUTDOOR SETTING.

LEGEND



WATER ZONE: 550  
 TEST GRADIENT: 700  
 COUNTY USE  
 WATER NO. 130-W  
 SEWER NO. 130-S  
 ZONE: PSC

SITE ANALYSIS

- TOTAL AREA OF SITE: 2,178,000 SQ. FT. OR 50.00 ± AC.
- ZONING: PSC
- EXISTING USE: AGRICULTURAL
- PROPOSED USE: AGE RESTRICTED ADULT HOUSING DEVELOPMENT
- BUILDING DATA: MAXIMUM BUILDING HEIGHT ALLOWED: APARTMENTS: 60 FEET  
 OTHER PRINCIPAL STRUCTURES: 34 FEET  
 ACCESSORY STRUCTURES: 15 FEET
- PARKING DATA: 588 SPACES
- IMPERVIOUS AREA: 16.74 AC
- DEED REFERENCE: 1220/554
- RELATED FILES FOR THIS SITE: SDP-08-075
- ELECTION DISTRICT NO. 2, HOWARD COUNTY MARYLAND
- TAX MAP: 24, GRID: 9, PARCEL 1001
- AREA OF DISTURBANCE: 37.0 ACRES.

TYPE OF BUILDINGS: RESIDENTIAL  
 NO. OF UNITS: 11  
 DRAINAGE AREA: 50.00  
 TREATMENT PLANT: LITTLE PATUXENT  
 NUMBER OF W.H.C.: 11  
 NUMBER OF S.H.C.: 0



PART III SEWER

- SHC'S SHALL BE 4" IN DIAMETER OR OTHERWISE INDICATED.
- ALL SEWER MAINS SHALL BE DIP OR PVC UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE DIP ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- 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 6" 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.

REVISED LOG

DATE	REVISION
12/2014	COUNTY COMMENTS
01/2015	COUNTY COMMENTS
02/2015	COUNTY COMMENTS
04/2015	ADD SANITARY SEWER TO PLAN SET
10/2016	REVERSE WATER FOR REBAR

**AS BUILTS**  
 DATE: 6-23-16

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

UNIT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
26	8815 VALS LANE	WHC TO WM - 4.2'	WHC TO SMH-25 - 19.8'
27	8819 VALS LANE	WHC TO WM - 4.1'	WHC TO SMH-25 - 72.8'
28	8823 VALS LANE	WHC TO WM - 3.9'	WHC TO I-88 - 39.5'
29	8824 VALS LANE	WHC TO WM - 3.9'	WHC TO SMH-24 - 91.2'
30	8824 VALS LANE	WHC TO WM - 3.5'	WHC TO FH-11 - 25.1'
31	8820 VALS LANE	WHC TO WM - 4.1'	WHC TO SMH-25 - 69.9'
32	2928 PAULS PROVISION	WHC TO WM - 4.3'	WHC TO FH-10 - 69.3'
33	2912 PAULS PROVISION	WHC TO WM - 3.4'	WHC TO SMH-27 - 19.1'
34	2911 PAULS PROVISION	WHC TO WM - 4.2'	WHC TO SMH-27 - 55.8'
35	2907 PAULS PROVISION	WHC TO WM - 4.3'	WHC TO FH-10 - 39.5'
36	2903 PAULS PROVISION	WHC TO WM - 4.6'	WHC TO I-82 - 4.3'

WM = WATER METER    WHC = WATER HOUSE CONNECTION

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

UNIT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
26	8815 VALS LANE	SHC TO WM - 18.8'	SHC TO SMH-25 - 21.5'
27	8819 VALS LANE	SHC TO WM - 19.6'	SHC TO I-88 - 48.8'
28	8823 VALS LANE	SHC TO WM - 5.9'	SHC TO I-88 - 42.9'
29	8824 VALS LANE	SHC TO WM - 20.7'	SHC TO SMH-24 - 80.5'
30	8824 VALS LANE	SHC TO WM - 7.7'	SHC TO FH-11 - 22.2'
31	8820 VALS LANE	SHC TO WM - 15.8'	SHC TO SMH-25 - 54.6'
32	2928 PAULS PROVISION	SHC TO WM - 9.5'	SHC TO FH-10 - 74.8'
33	2912 PAULS PROVISION	SHC TO WM - 21.6'	SHC TO SMH-27 - 16.8'
34	2911 PAULS PROVISION	SHC TO WM - 30.2'	SHC TO SMH-27 - 31.4'
35	2907 PAULS PROVISION	SHC TO WM - 9.9'	SHC TO FH-10 - 35.9'
36	2903 PAULS PROVISION	SHC TO WM - 7.6'	SHC TO I-82 - 38.7'

SHC = SEWER HOUSE CONNECTION

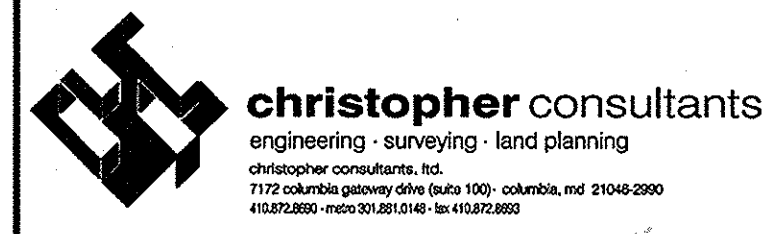
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND AS SHOWN ON SDP-08-075

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
  
 JOHN H. ROBERTS    4/23/15  
 HOWARD SOIL CONSERVATION DISTRICT    DATE

OWNER / DEVELOPER  
 LUTHERAN VILLAGE AT MILLER'S GRANT  
 C/O CARROLL LUTHERAN VILLAGE  
 CONTACT: ROY CHAMBERLAIN, EXECUTIVE VICE PRESIDENT  
 300 SAINT LUKE CIRCLE  
 WESTMINSTER, MD 21158  
 (410) 848-0090

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
  
 STEVE CHAN    4/23/15  
 CHIEF, BUREAU OF UTILITIES    DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
  
 JOHN M. G...    5-29-15  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION    DATE



DES:	DAM		
DRN:	DAM		
CHK:	ENJ		
DATE:	JUL 2014		
C.H.C. BY NO.	1	ADJUST WATER MAIN ELEVATION PER GERMINK A.S.	
REVISION			

COVER SHEET

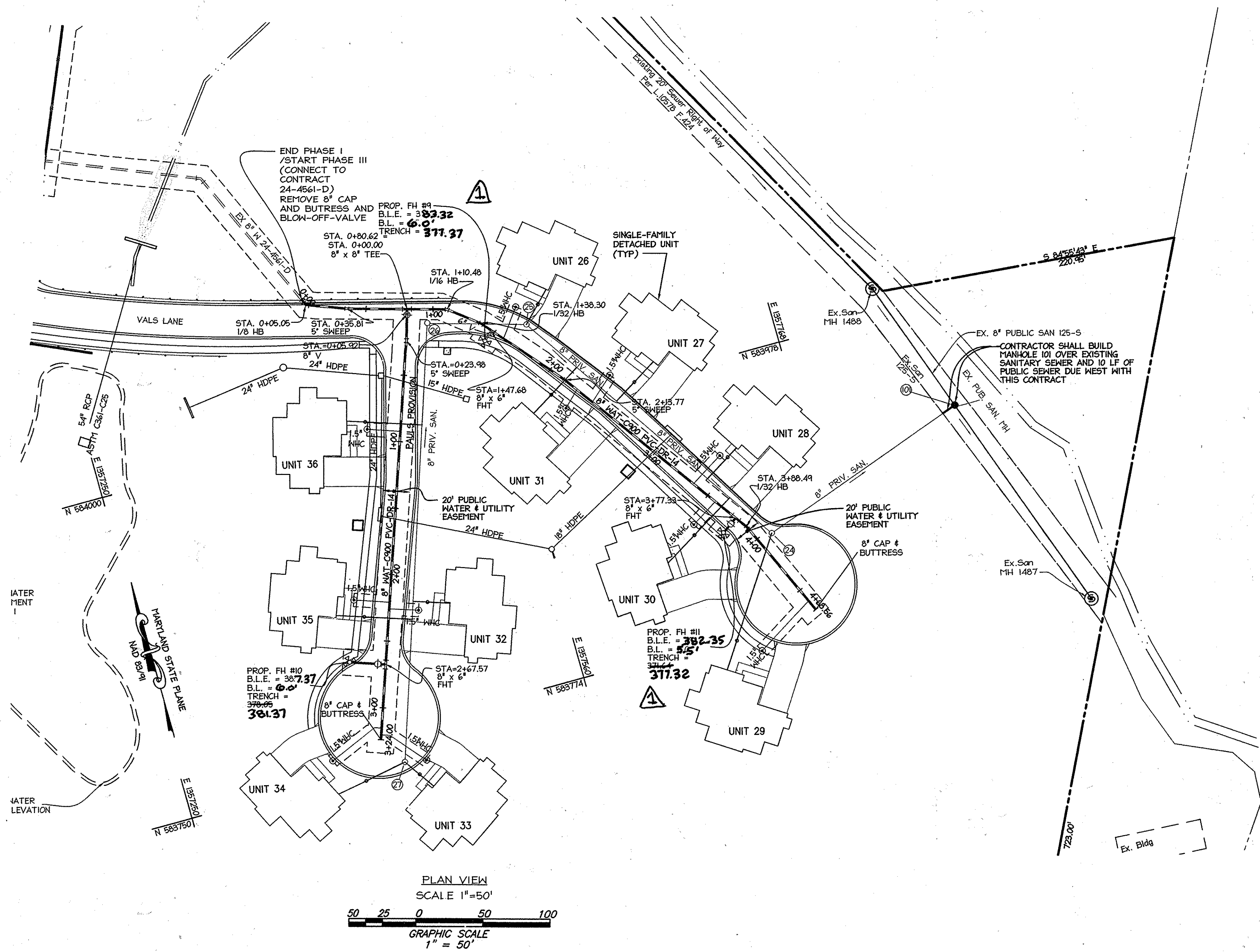
WATER AND SEWER EXTENSION - PHASE III  
**LUTHERAN VILLAGE AT MILLER'S GRANT**  
 CONTRACT NO. 24-4894-D

SCALE: AS SHOWN  
 SHEET: 1 OF 3

TAX MAP 24 GRID 9, PARCEL 1001    ZONE: PSC  
 2nd ELECTION DISTRICT    HOWARD COUNTY, MARYLAND

600 SCALE MAP NO. 24    BLOCK NO. 9





PLAN VIEW  
SCALE 1" = 50'  
GRAPHIC SCALE  
1" = 50'

cd REVISION LOG

DATE	REVISION
12/2014	COUNTY COMMENTS
01/2015	COUNTY COMMENTS
02/2015	COUNTY COMMENTS
04/2015	ADD SANITARY SEWER TO PLAN SET
10/2015	REVISE WATER FOR RECORD

**AS BUILTS**  
DATE 6-23-16

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*S. C. Owen*  
CHIEF, BUREAU OF UTILITIES  
DATE 4/22/15

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*M.G.*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE 5-29-15

**christopher consultants**  
engineering · surveying · land planning  
christopher consultants, inc.  
7122 colandrea gateway drive suite 100 · columbia, md 21046-2990  
410.321.8800 · fax: 410.321.8148 · www.christopherconsultants.com

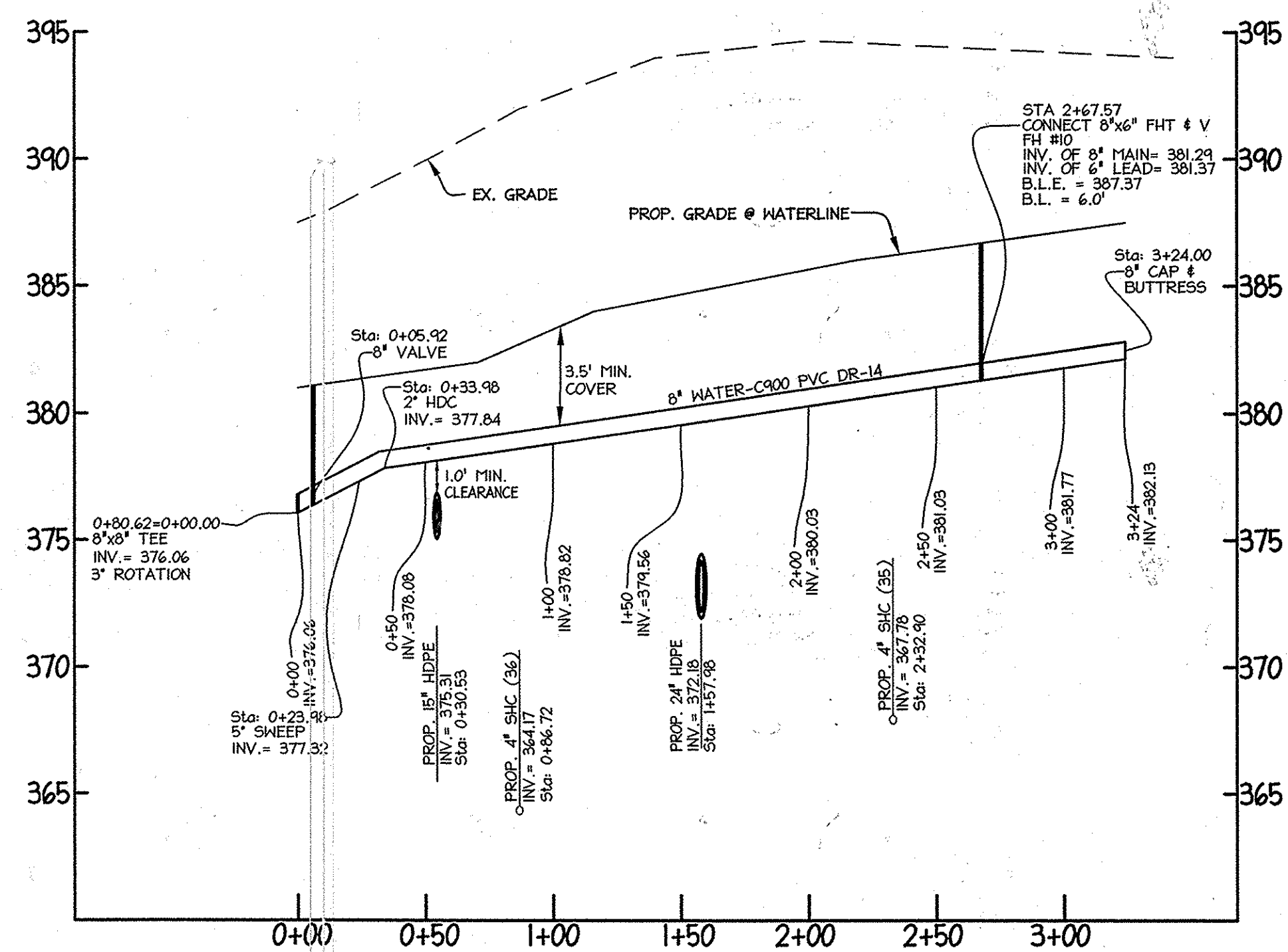


DES:	DAM				
DRN:	DAM				
CHK:	ENJ				
DATE:	JUL, 2014	CHK	1	ADJUST WATER MAIN ELEVATIONS PER GRADING A.D.S.	12/15/15
		BY	NO.	REVISION	DATE

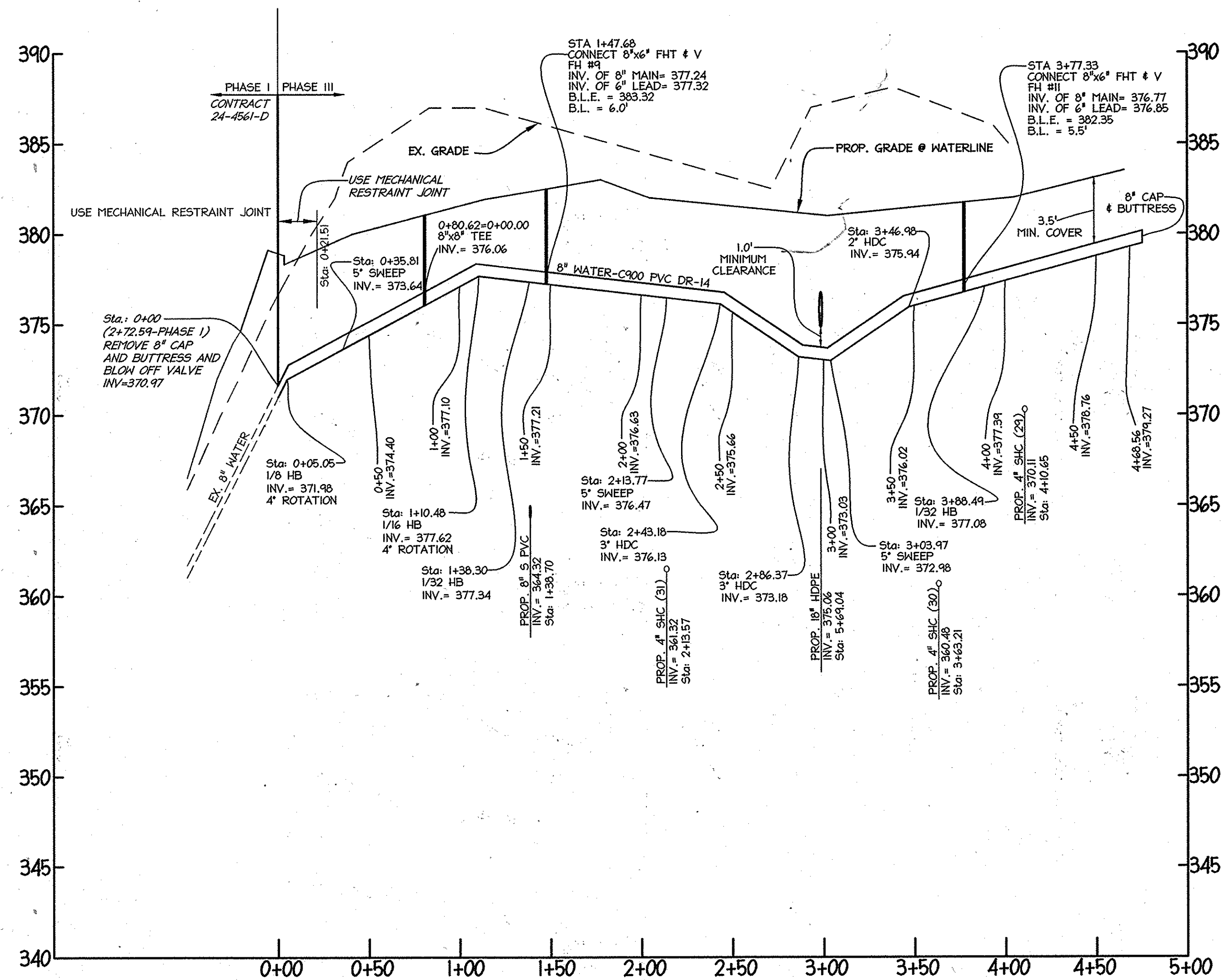
WATER  
EXTENSION PLAN  
600 SCALE MAP NO. 24 BLOCK NO. 9  
2nd ELECTION DISTRICT

WATER AND SEWER EXTENSION - PHASE III  
**LUTHERAN VILLAGE**  
AT MILLER'S GRANT  
CONTRACT NO. 24-4894-D  
TAX MAP 24 GRID 9, PARCEL 1001 ZONE: PSC  
HOWARD COUNTY, MARYLAND

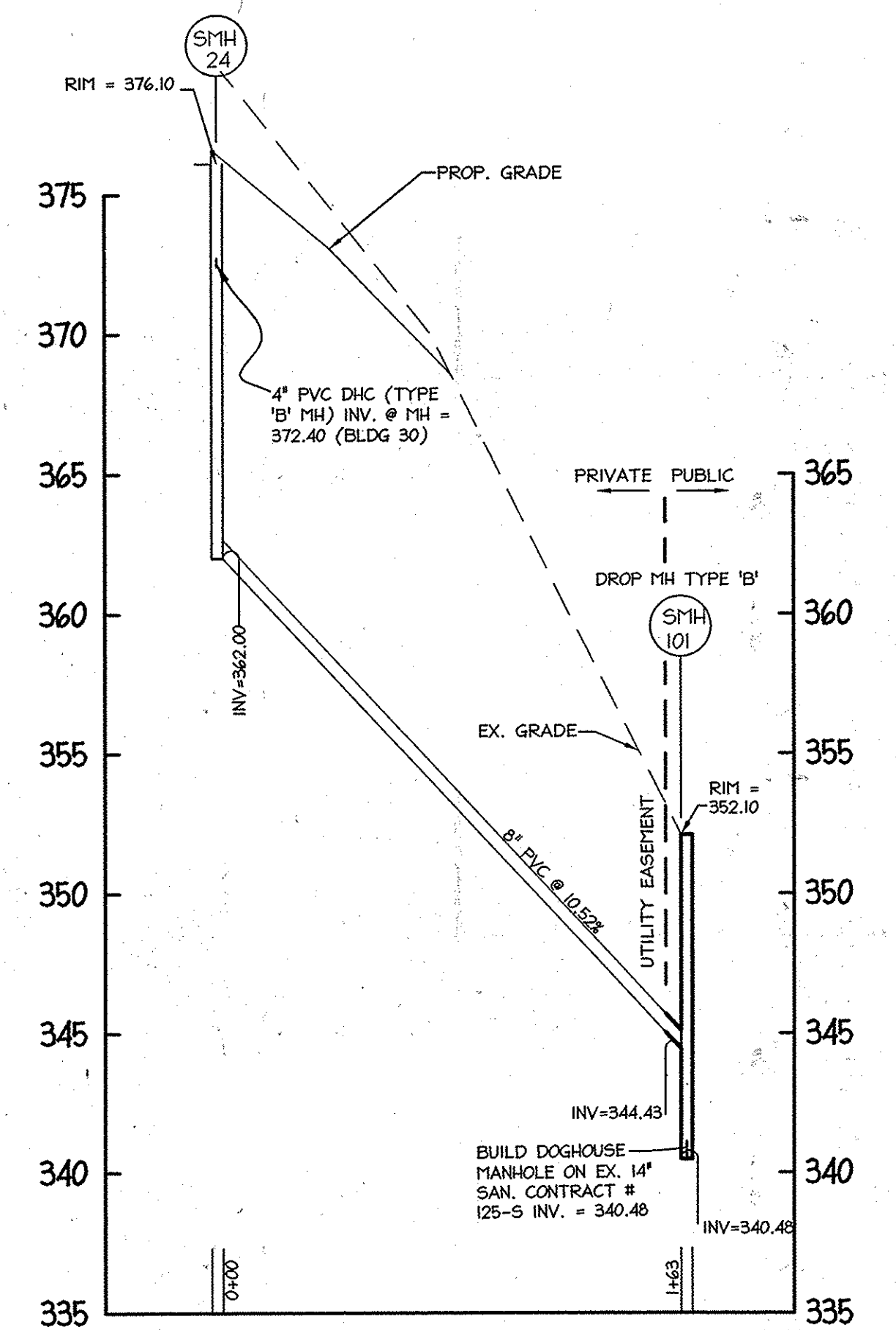
SCALE  
1" = 50'  
SHEET  
2 OF 3



PROPOSED PUBLIC 8" WATER PROFILE @ PAUL'S PROVISION  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'



PROPOSED PUBLIC 8" WATER PROFILE @ VALS LANE (WATER MAIN "H")  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'



PROPOSED PUBLIC 8" SANITARY PROFILE @ SAN MH#24  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

WATER APPURTENANCE SCHEDULE

STATION	ROAD (WATER MAIN)	DESCRIPTION	NORTHING	EASTING
2+72.59+0+00	VAL'S LANE (MAIN "H")	REMOVE 8" CAP AND BUTRESS AND BLOW-OFF VALVE	58403.57	135743.16
0+05.05	VAL'S LANE (MAIN "H")	1/6 8" HB	58409.96	135743.23
0+35.81	VAL'S LANE (MAIN "H")	5' SHEEP	58408.00	135746.97
0+80.62	VAL'S LANE (MAIN "H") PAUL'S PROVISION	8" x 8" TEE	58407.75	1357507.07
1+10.48	VAL'S LANE (MAIN "H")	1/6 8" HB	58406.58	1357535.80
1+38.30	VAL'S LANE (MAIN "H")	1/32 8" HB	58405.31	1357557.60
1+47.68	VAL'S LANE (MAIN "H")	8" x 6" FHT & VALVE	584043.17	1357563.68
2+13.77	VAL'S LANE (MAIN "H")	5' SHEEP	58392.82	1357606.49
3+77.33	VAL'S LANE (MAIN "H")	8" x 6" FHT & VALVE	58389.45	1357701.19
3+88.49	VAL'S LANE (MAIN "H")	1/32 8" HB	58385.36	1357707.65
4+68.56	VAL'S LANE (MAIN "H")	8" CAP AND BUTRESS	583777.28	1357740.38
0+05.92	PAUL'S PROVISION	8" VALVE	584071.58	1357505.83
0+23.98	PAUL'S PROVISION	5' SHEEP	584052.76	1357500.26
2+67.57	PAUL'S PROVISION	8" x 6" FHT & VALVE	583822.73	1357420.12
3+23.98	PAUL'S PROVISION	8" CAP AND BUTRESS	583769.48	1357401.63

WATER HOUSE CONNECTION SCHEDULE

STATION	ROAD (WATER MAIN)	DESCRIPTION	NORTHING	EASTING
1+58.24	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	584022.47	1357561.33
2+24.94	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	583981.72	1357610.92
2+39.74	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	583971.02	1357620.82
3+36.79	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	583940.87	1357675.05
3+57.88	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	583872.95	1357686.09
4+60.22	VAL'S LANE (MAIN "H")	1.5" FIRE AND DOMESTIC (OUTSIDE)	583786.36	1357739.35
0+42.40	PAUL'S PROVISION	1.5" FIRE AND DOMESTIC (OUTSIDE)	583988.23	1357477.52
2+20.77	PAUL'S PROVISION	1.5" FIRE AND DOMESTIC (OUTSIDE)	583862.23	1357433.82
2+25.77	PAUL'S PROVISION	1.5" FIRE AND DOMESTIC (OUTSIDE)	583869.95	1357433.03
3+15.39	PAUL'S PROVISION	1.5" FIRE AND DOMESTIC (OUTSIDE)	583774.21	1357403.29
3+20.39	PAUL'S PROVISION	1.5" FIRE AND DOMESTIC (OUTSIDE)	583772.83	1357402.81

SANITARY STRUCTURE SCHEDULE

STRUCTURE	TYPE	REMARKS	NORTHING	EASTING
SMH 101	4'-0" DIA. MANHOLE	HQ. CO. STD. MANHOLE DETAIL NO. G-5.14 (DOGHOUSE)	583947	1357881

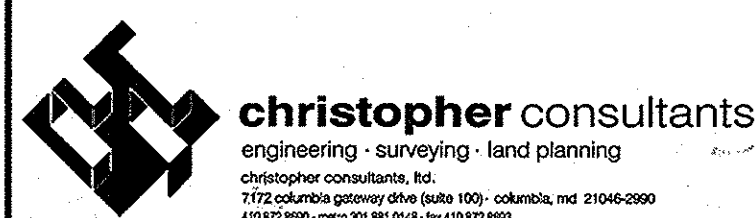
**AS BUILTS**  
DATE: 6-23-16

REVISION LOG

DATE	REVISION
12/2014	COUNTY COMMENTS
01/2015	COUNTY COMMENTS
02/2015	COUNTY COMMENTS
04/2015	ADD SANITARY SEWER TO PLAN SET
12/2015	REVISE WATER FOR RE-GRADE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND



DES:	DAM				
DRN:	DAM				
CHK:	ENJ				
DATE:	JUL, 2014				
EG	1	REVISE WATER FOR RE-GRADE			12/15
BY	NO.	REVISION			DATE

WATER  
PROFILES  
AND  
FITTINGS

WATER AND SEWER EXTENSION - PHASE III  
**LUTHERAN VILLAGE**  
AT MILLER'S GRANT  
CONTRACT NO. 24-4894-D

SCALE

1" = 50'

SHEET

3 OF 3

600 SCALE MAP NO. 24 BLOCK NO. 9

2nd ELECTION DISTRICT

TAX MAP 24 GRID 9, PARCEL 1001  
ZONE: PSC  
HOWARD COUNTY, MARYLAND

MDC-825(W45)