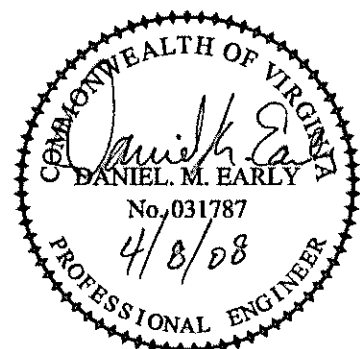


# Westlake Village

## Central Sewer System

### Franklin County, Virginia



# ACS

## DESIGN

ENGINEERING • SURVEYING  
LANDSCAPE ARCHITECTURE  
CONSTRUCTION MANAGEMENT

2203 PETERS CREEK ROAD  
ROANOKE, VIRGINIA 24017  
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INFO@ACSDESIGNLLC.COM  
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#### ABBREVIATIONS AND ACRONYMS

ABAN	ABANDONED	MAS	MASONRY
AC	ADJACENT	MATL	MATERIAL
ADJ	ADJACENT	MAX	MAXIMUM
AGGR	AGGREGATE	MB	MAIL BOX
ALUM	ALUMINUM	MBL	MINIMUM BUILDING LINE
ANC	ANCHOR	MECH	MECHANICAL
BC	BACK OF CURB	MFR	MANUFACTURER
BEG	BEGINNING	MH	MANHOLE
BIT	BITUMENOUS	MIN	MINIMUM
BJ	BELL JOINT	MJ	MECHANICAL JOINT
BL	BASE LINE	MON	MONUMENT
BLDG	BUILDING	MTL	METAL
BM	BENCH MARK	N&C	NAIL AND CAP
BO	BLOW-OFF VALVE	NBL	NORTHBOUND LANE
BSP	BLACK STEEL PIPE	NIC	NOT IN CONTRACT
BY	BUTTERFLY VALVE	NO	NO
BVCE	BEGIN VERTICAL CURVE ELEVATION	NPW	NON-POTABLE WATER
BVCS	BEGIN VERTICAL CURVE STATION	NTS	NOT TO SCALE
C&G	CURB AND GUTTER	OC	ON CENTER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CI	CAST IRON	OHE	OVERHEAD ELECTRIC
CL	CENTER LINE	OIU	OVERHEAD UTILITIES
CMP	CORRUGATED METAL PIPE	PC	POINT OF CURVE
CMU	CONCRETE MASONRY UNITS	PCC	POINT OF COMPOUND CURVE
CO	CLEANOUT	PER	PERIMETER
COE	U.S. ARMY CORPS OF ENGINEERS	PERP	PERPENDICULAR
COL	COLUMN	PI	POINT OF INTERSECTION
COMB	COMBINATION	PL	PROPERTY LINE
CONC	CONCRETE	POL	POINT ON LINE
CONST	CONSTRUCTION	PP	POWER POLE
CONV	CONVEYOR	PRC	POINT OF REVERSE CURVE
COR	CORNER	PSI	POUNDS PER SQUARE INCH
CTR	CENTER	PT	POINT OF TANGENT
CTV	CABLE TELEVISION	PUE	PUBLIC UTILITY EASEMENT
CULV	CULVERT	PUPPE	PUBLIC UTILITY & PEDESTRIAN PATHWAY EASEMENT
D	DEPTH	PVC	POLYVINYL CHLORIDE
D/W	DRIVEWAY	PVC	POINT OF VERTICAL CURVE
DE	DRAINAGE EASEMENT	PVI	POINT OF VERTICAL INTERSECTION
DEQ	VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY	PVMT	PAVEMENT
DI	DROP INLET	R	RADIUS
DIA, Ø	DIAMETER	R/W	RIGHT OF WAY
DM	DIMENSION	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	RD	ROAD
DISC	DISCONNECT	RDCR	REDUCER
DMH	DROP MANHOLE	REF	REFERENCE
DOC	DEGREE OF CURVE	REINF	REINFORCEMENT
DTL	DETAIL	REL	RELOCATED
DWG	DRAWING	REQD	REQUIRED
DWL	DWELLING	REV	REVISION
EA	EACH	RR	RAILROAD
EHL	EASTBOUND LANE	RTE	ROUTE
EP	EACH FACE	S/W	SIDEWALK
ELEC	ELECTRICAL	SAN	SANITARY
ELEV	ELEVATION	SBL	SOUTHBOUND LANE
ENGR	ENGINEER	SD	STORM DRAIN
ENTR	ENTRANCE	SE	SLOPE EASEMENT
EOL	END OF LINE	SEC	SECTION
EP	EDGE OF PAVEMENT	SF	SQUARE FEET
EQ	EQUAL	SH	SHEET
EQPT	EQUIPMENT	SIM	SIMILAR
EVCE	END VERTICAL CURVE ELEVATION	SIMH	SEWER MANHOLE
EVCS	END VERTICAL CURVE STATION	SPEC	SPECIFICATION
EW	EACH WAY	SQ	SQUARE
EXST	EXISTING	SS	SANITARY SEWER
EXT	EXTERIOR	SSSD	SAFE STOPPING SIGHT DISTANCE
FC	FACE OF CURB	ST	STREET
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	STA	STATION
FES	FLARED END SECTION	STD	STANDARD
FPE	FINISHED FLOOR ELEVATION	SUR	SURVEY
FIG	FIGURE	SVC	SERVICE
FIN	FINISH	TEL	TELEPHONE
FLG	FLANGE	TEMP	TEMPORARY
FM	FORCE MAIN	TP	TELEPHONE POLE
FT	FOOT, FEET	TRTD	TREATED
FTG	FOOTING	TW	TOP OF WALL
FUT	FUTURE	TYP	TYPICAL
GA	Gauge	UE	UNDERGROUND ELECTRIC
GAL	GALLON	UG	UNDERGROUND GAS
GALV	GALVANIZED	UGD	UNDERGROUND
GAR	GARAGE	UL	UNDERWRITERS LABORATORY
GND	GROUND	UN	UNLESS OTHERWISE NOTED
GOVT	GOVERNMENT	USGS	U.S. GEOLOGIC SURVEY
GPD	GALLONS PER DAY	UT	UNDERGROUND TELEPHONE
GPM	GALLONS PER MINUTE	V	VENT
GR	GRAVEL	VAL	VALVE
GRG	GRATING	VAR	VARIABLE
GV	GATE VALVE	VC	VERTICAL CURVE
H&T	HUB AND TAC	VH	VIRGINIA DEPARTMENT OF HEALTH
H&M	HOLLOW METAL	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
HOR	HORIZONTAL	VERT	VERTICAL
HPT	HIGH POINT	VESCH	VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK
HR	HYDRANT	VNL	VINYL
HYD	HYDRANT	VOL	VOLUME
ID	INSIDE DIAMETER	W	WATER
IN	INCH	W/I	WITH
INSL	INSULATION	W/O	WITHOUT
INT	INTERIOR	WBL	WESTBOUND LANE
INV	INVERT	WL	WATER LINE
IPF	IRON PIN FOUND	WM	WATER METER
IPS	IRON PIN SET	WHH	WATER MANHOLE
L	LENGTH LONG	WS	WATER SURFACE
LF	LINEAR FOOT	WT	WEIGHT
LP	LIGHT POLE	WTT	WATERTIGHT
LPG	LIQUID PETROLEUM	WV	WATER VALVE

#### EXISTING

#### PROPOSED

#### DESCRIPTION

		BUILDING WITH PORCH OR STOOP
		FOUNDATION ONLY
		CONTOUR, CONTOUR WITH ELEVATION
		SPOT ELEVATION
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONCRETE WALK OR SLAB
		PAVEMENT
		UNPAVED OR GRAVEL ROAD
		TREE LINE
		TREE OR SHRUB
		FENCE (EXISTING OR PROPOSED NOTED)
		CENTERLINE CREEK, SWALE, DITCH
		PROPERTY LINE
		CENTERLINE OR BASELINE
		FIELD SURVEY TRAVERSE POINT
		GEOLOGIC BORE HOLE
		BENCH MARK (EXISTING OR SET NOTED)
		STORM DRAIN
		SANITARY SEWER
		FORCE MAIN
		GAS MAIN OR SERVICE LINE
		WATER MAIN OR SERVICE LINE
		OVERHEAD ELECTRICAL LINE
		OVERHEAD TELEPHONE LINE
		UNDERGROUND ELECTRICAL LINE
		UNDERGROUND TELEPHONE LINE
		PIPE FITTINGS
		FIRE HYDRANT
		GATE VALVE
		CLEANOUT
		MANHOLE
		DROP INLET (CURB AND GRATING TYPES)
		WM - WATER METER
		DWM - DOUBLE WATER METER
		UTILITY POLE
		LIGHT POLE
		TELEPHONE PEDESTAL
		BURIED TELEPHONE VAULT
		PAVED DITCH
		CULVERT WITH FLARED END SECTION
		AIR RELEASE VALVE / VAULT ASSEMBLY
		BLOW OFF VALVE / VAULT ASSEMBLY
		STEEL ENCASEMENT
		CONCRETE ENCASEMENT
		ABANDON OR REMOVE
		LIMITS OF DISTURBED AREA
		WATERLINE PLUG

#### CONTACT INFORMATION

FRANKLIN COUNTY PLANNING DEPARTMENT  
C/O AARON BURDICK  
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FRANKLIN COUNTY UTILITY DEPARTMENT  
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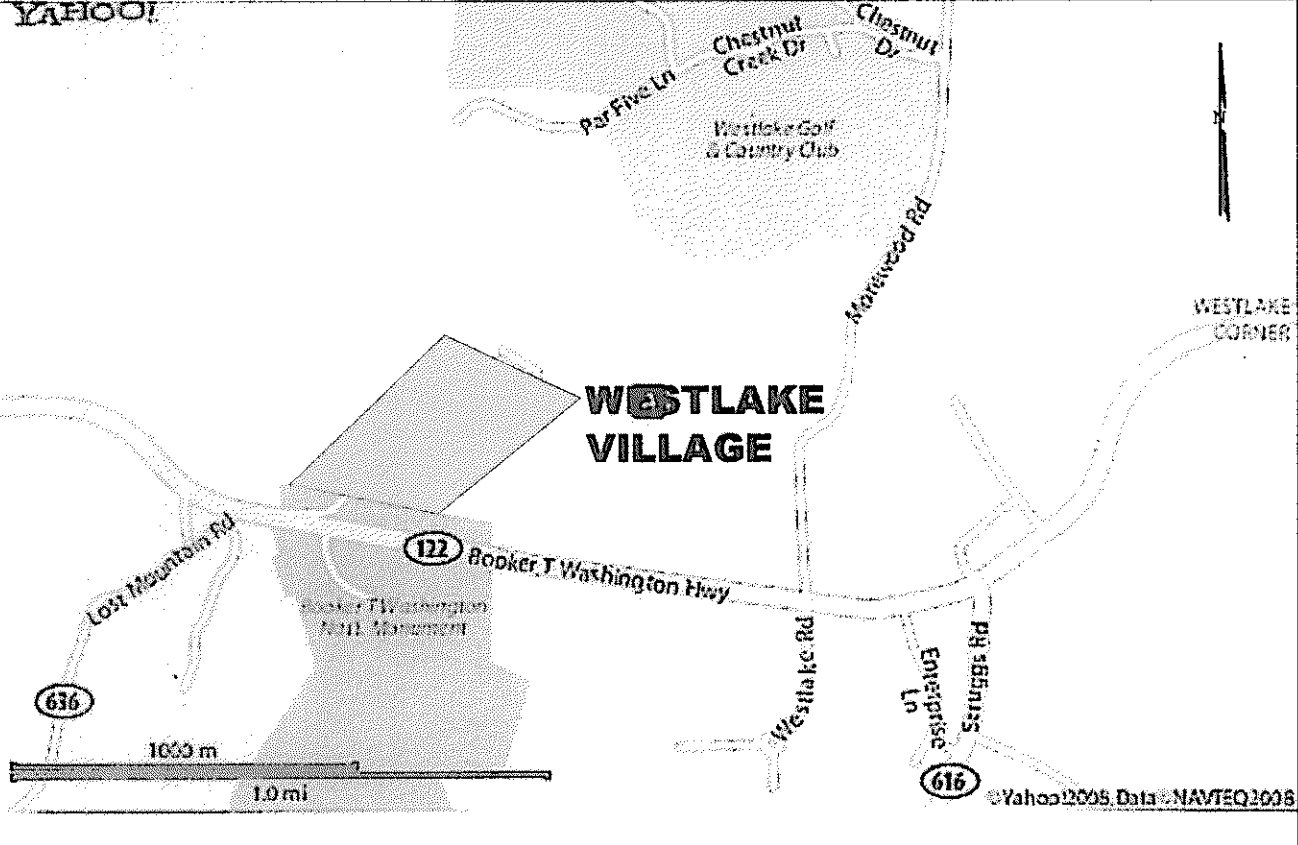
FRANKLIN COUNTY HEALTH DEPARTMENT  
ENVIRONMENTAL HEALTH SERVICES  
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VIRGINIA DEPARTMENT OF HEALTH  
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GOODE, VA 24556  
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FAX: (540) 587-7126

BERKLEY-HOWELL & ASSOCIATES PC  
306 ENTERPRISE DR.  
FOREST, VIRGINIA 24551  
PHONE: (434) 385-7548



VICINITY MAP

#### RESPONSIBLE LAND DISTURBER CERTIFICATION

PRINTED NAME \_\_\_\_\_

SIGNATURE \_\_\_\_\_

COMPANY NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

RESPONSIBLE LAND DISTURBER CERTIFICATION NUMBER \_\_\_\_\_

#### OWNER/DEVELOPER CERTIFICATION

THE OWNER/DEVELOPER CERTIFIES THAT THEY UNDERSTAND THE SITE DESIGN REQUIREMENTS IMPOSED BY THE SITE DEVELOPMENT PLANS AND APPLICABLE COUNTY CODES, AS SHOWN HEREON, AND AGREES TO COMPLY WITH THESE PLANS DURING CONSTRUCTION, UNLESS MODIFICATIONS TO PLANS ARE APPROVED BY \_\_\_\_\_ COUNTY.

OWNER REPRESENTATIVE \_\_\_\_\_

#### STATE OF VIRGINIA

I, \_\_\_\_\_ OF \_\_\_\_\_, A NOTARY PUBLIC IN AND FOR THE AFORESAID COUNTY AND STATE DO HEREBY CERTIFY THAT \_\_\_\_\_, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING DATED \_\_\_\_\_, HAS PERSONALLY APPEARED BEFORE ME IN MY AFORESAID COUNTY AND STATE AND ACKNOWLEDGED THE SAME ON \_\_\_\_\_, MY COMMISSION EXPIRES \_\_\_\_\_.

NOTARY PUBLIC \_\_\_\_\_

OWNER/DEVELOPER:

WESTLAKE CORPORATION  
MR. WILLIAM A. BERRY, VICE PRESIDENT  
40 VILLAGE SPRINGS DRIVE, SUITE #21  
HARDY, VIRGINIA 24101  
PHONE: (540) 719-7000

SHEET INDEX:	
C1.1	COVER SHEET
C1.2	MASTER SITE PLAN
C1.3	MASS DRAINFIELD AREAS 1 - 3 SITE PLAN
C1.4	MASS DRAINFIELD AREA 4 SITE PLAN
C1.5	MASS DRAINFIELD SCHEDULE & DETAILS

C2.1	EROSION & SEDIMENT CONTROL DETAILS
C2.2	EROSION & SEDIMENT CONTROL DETAILS
C2.3	E&S SITE PLAN

C3.1	FORCEMAIN FM-100 PLAN & SCHEDULE
C3.2	FORCEMAIN FM-100 PLAN & SCHEDULE
C3.3	FORCEMAIN FM-100 PLAN & SCHEDULE
C3.4	MASTER SEWER PLAN
C3.5	FORCEMAIN DETAILS

C4.1	WWTP & ACCESS ROAD SITE PLAN
C4.2	BIOWHEEL PLAN
C4.3	BIOWHEEL EQUIPMENT SCHEDULE & NOTES
C4.4	WWTP EQUIPMENT PLAN
C4.5	DISC FILTER
C4.6	WWTP EQUIPMENT DETAILS
C4.7	STANDARD WWTP FENCE DETAILS
C4.8	EFFLUENT STORAGE TANK STRUCTURAL DETAIL

C5.1	WWTP LAB FLOOR PLAN, NOTES, & DETAILS
C5.2	WWTP LAB BUILDING SECTION & NOTES
C5.3	WWTP LABORATORY NOTES & DETAILS

E-1	SERVICE RISER DIAGRAM, GENERAL NOTES, SPECS, LEGEND, & ABBREVIATIONS
E-2	SITE PLAN
E-3	LAB BLDG & BIOWHEEL PLANS

DRAWN BY: JJD		REVISIONS:	
DESIGNED BY: DME		No. 1	25 JAN 2008
CHECKED BY:		PER ACS DESIGN	
DATE: 15 JUNE 2007		No. 2	22 APR 2008
JOB NUMBER: 06145		REVISE DISC FILTER PER WTWFC	
		No. 3	
SHEET NUMBER: C1.1		No. 4	

COVER SHEET