



HOWARD COUNTY HEALTH DEPARTMENT

64724

DATE
1/15/19

PS

Received From

Loftis Septic Clean

PHONE #

410-945-5070

For

septic permit - 7429

Cherry Tree Dr

Three hundred ninety six

Dollars

CASH

CHECK

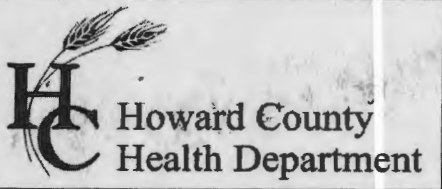
NO.

603247

\$ 396.00

Received By

[Signature]



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 1/15/19 **ONSITE SEWAGE DISPOSAL SYSTEM** P 564724

APPROVAL DATE: 05/14/2019 **PERMIT: UPGRADE** A _____

PROPERTY ADDRESS: 7429 Cherry Tree Drive

SUBDIVISION: _____ LOT: _____ TAX ID: 04-334329

CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: kim@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

PROPERTY OWNER: Norman Adams EMAIL: _____

OWNER ADDRESS: 7429 Cherry Tree Drive, Fulton, MD 20759 PHONE: _____

SEPTIC TANK SIZE (GALLONS): 1500 PUMP CHAMBER CAPACITY (GALLONS): 1500 PUMP SIZE: 1/3 HP

NUMBER OF BEDROOMS: 5 HOUSE SQ. FT. _____ APPLICATION RATE: 0.8

DISTRIBUTION SYSTEM: GRAVITY FED LOW PRESSURE DOSED

TRENCHES:	LINEAR FEET REQUIRED: <u>141</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u>
LOCATION:	TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install 2 ⁴ x 7 ³⁶ trenches	

ISSUED BY: Hank oswald ISSUE DATE: 1/15/19 EXPIRATION DATE: 1/15/20

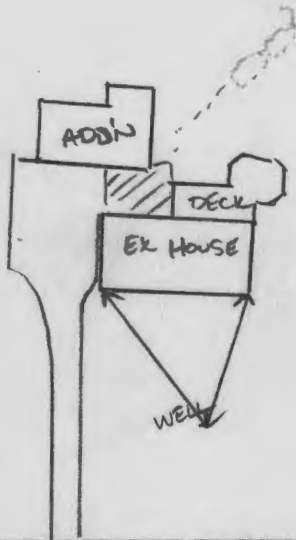
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E N/A
- NOTE: THE HCHD DOES NOT WARRANTY ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

NOT TO SCALE

NOTE:

SEE 1" ~ 30'
AS-BUILT
on attached
Sheet



ROAD NAME
CHERRY TREE DRIVE

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		144'
ABSORPTION AREA		144' + sidewall
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		-
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA

SEPTIC TANK I LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	top
TANK LID DEPTH	2.5' - 3'
BAFFLES	6" F / 4" B
BAFFLE FILTER	-
MANHOLE LOC	Front / Back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	3/22/19
PUMP/SEPTIC TANK LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	top
TANK LID DEPTH	2.5' - 3'
BAFFLES	-
BAFFLE FILTER	-
MANHOLE LOC	back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	3/18/19

PRE-CONSTRUCTION:

2/26/19 Matt Fogle's on site for layout. Dig up pipe to D-box, top of pipe at 5' depth liquid level in tank 45" below grade. TI location is 35" higher than tank, need 19" fall for 2% - will not make 4' inlet at trenches by gravity. Need a pump tank, redesigned trenches, or shallower plumbing leaving house to make inlet. Shot contour at trenches and laid out 2 x 73' - must use laser to dig, middle is ~8" lower. (SC) 5/1/2019 Laid out 4x36' TRENCH. OK TO START. (+)

INSTALLATION: 5/1/2019 Two UPPER TRENCH COMPLETE. THIRD 1/2 COMPLETE (+)

5/2/19 site inspection, contractor onsite, all trenches complete, 10' ETE, Stone looks good, 5' bottom, 4' inlet, 3' wide, approx 40' of force main from DBox towards septic tank has been installed, ok to continue. (aa)

5/3/19 site visit contractor onsite, both tanks set, baffles in place, force main: was installed and only partially left open for inspection due to site restrictions, SHC not observed and pump/alarm still required, ok to continue. (aa)

5/6/2019 SHC VERIFIED IN FIELD. OK TO BACKFILL. BEINS P/A (+) 5/14/2019 RIGHT PANEL CIRCUIT 6-SEPTIC CONTROLS (ALARM) CIRCUIT 5-SEPTIC PUMP. Flow TO D Box WORKS. (+)

FINAL INSPECTOR

DATE OF APPROVAL

05/14/2019

SOILS TABLE

SYMBOL	DESCRIPTION	HYDROLOGIC SOILS GROUP
GhB	GLENELG-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B

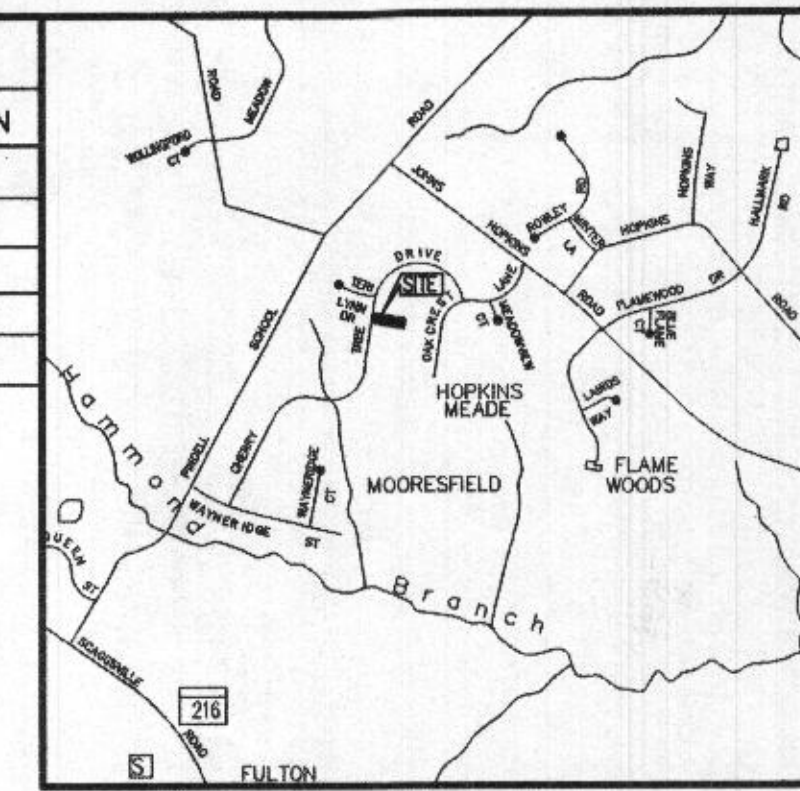
BENCHMARK DATA

TRAV	NORTHING	EASTING	ELEVATION
2	546121.42	1335644.77	483.88
3	546034.64	1336002.84	487.26
4	546004.65	1335723.65	481.53
5	546013.50	1335842.54	480.33
6	546077.96	1335819.55	483.40

SITE NOTES

APPLICANT/OWNER: NORMAN & ELENA ADAMS
 CONTACT: NORMAN ADAMS
 ADDRESS: 7429 CHERRY TREE DRIVE, FULTON, MD 20759

1. SITE DATA:
 TAX IDENTIFICATION No.: 252312
 TAX MAP / GRID: 0041/0014
 LIBER / FOLIO: 11305/415
 PLAT: 10/65
 WATER DESIGNATION: WELL
 SEWER DESIGNATION: SEPTIC
 ELECTION DISTRICT: 13
 SITE AREA: 0.06 AC.
 SITE ADDRESS: 7429 CHERRY TREE DRIVE, FULTON, MD 20759



VICINITY MAP

SCALE: 1"=2000'
 ADC MAP/GRID: 18/J2

- EXISTING USE: RESIDENTIAL HOUSING
 PROPOSED USE: RESIDENTIAL HOUSING
- ZONING OF SITE IS RR-DEO (RURAL RESIDENTIAL)
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY BY KCI ON OR ABOUT JANUARY, 2018 AND ONLINE GIS TOPOGRAPHY FROM HOWARD COUNTY GOVERNMENT.
- BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A BOUNDARY SURVEY COMPLETED BY KCI TECHNOLOGIES, INC ON OR ABOUT JANUARY 2018.
- NOTIFY "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATED AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- THERE ARE NO HIGHLY ERODIBLE SOILS ON SITE.
- ALL SOILS ON SITE ARE GLENELG-URBAN LAND COMPLEX, HYDRAULIC SOIL GROUP B. SLOPES FROM 0 TO 8 PERCENT SLOPES.
- THERE ARE NO STEEP SLOPES ON SITE.
- THERE ARE NO CEMETERIES ON SITE OR ADJOINING THE PROPERTY.
- THERE ARE NO HISTORIC SITES ON SITE OR ADJOINING THE PROPERTY.
- THERE ARE NO SPRINGS OR SEEPS ONSITE.
- THERE ARE NO BEDROCK OR MARLBORO OUTCROPS ONSITE.
- THERE ARE NO WETLANDS ONSITE.
- THE PROJECT SITE DOES NOT LIE WITHIN A 100-YEAR FLOOD PLAIN PER FEMA MAP NO. 24027C0145D EFFECTIVE 11-06-2013.
- THE SITE IS NOT LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
- THE SITE IS LOCATED IN THE TIER II CATCHMENT AREA, LITTLE PATUXENT RIVER HYDROLOGIC UNIT CODE: 021311, 8-DIGIT WATERSHED ID: 02131105.
- EXISTING SEPTIC TANK AND TRENCH LOCATED PER MARYLAND STATE DEPARTMENT OF HEALTH SEWAGE DISPOSAL TESTING AD9954 P17445 ON 09/07/72.

PLAN NOTES

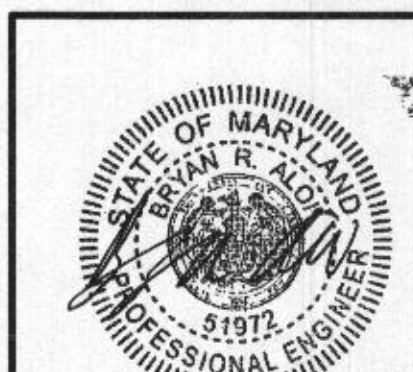
- ANY CHANGES TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (TAG # _____) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
- ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

MDE STATEMENT FOR LOTS CREATED AFTER MARCH 1972:
 THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY."

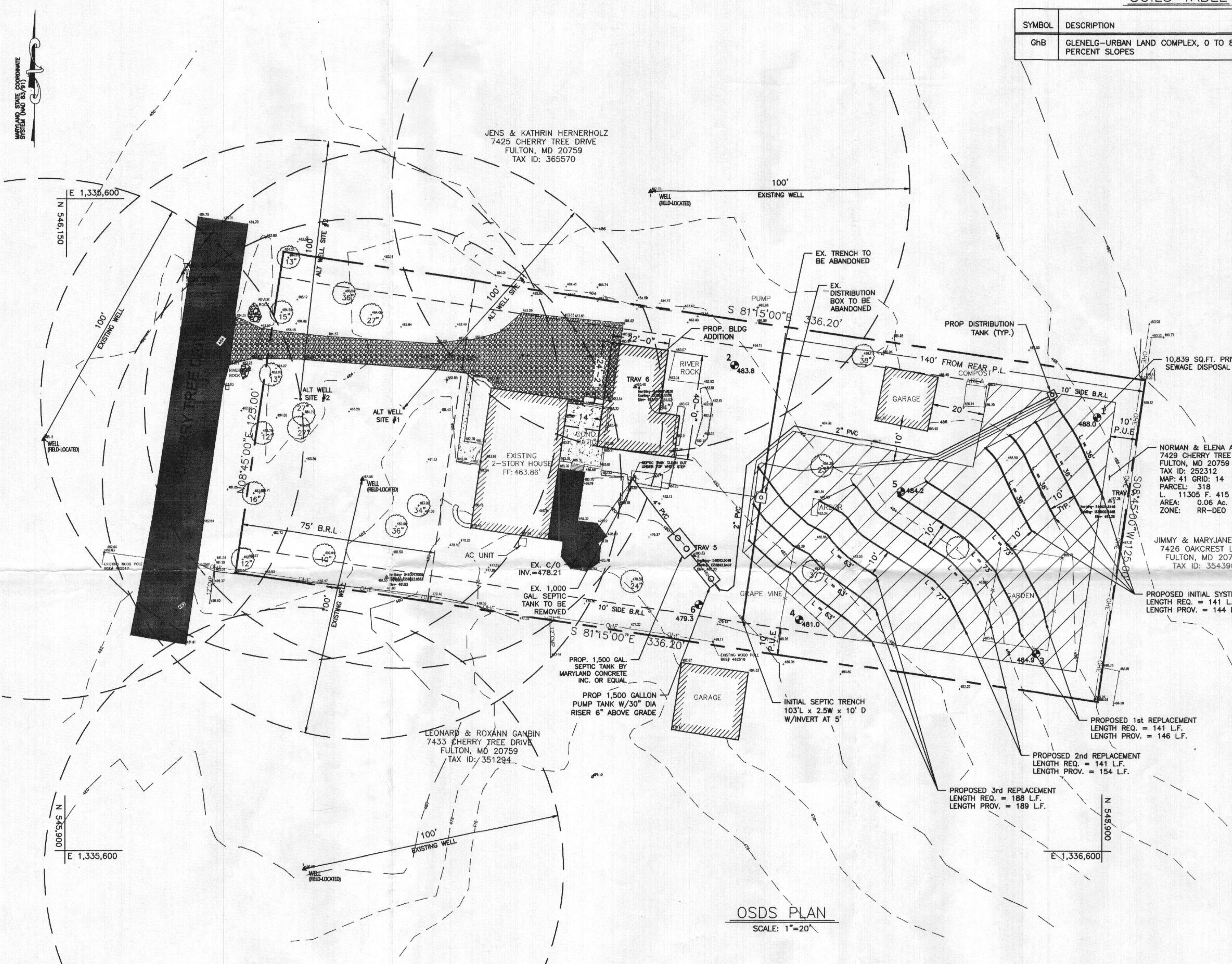
LEGEND

- PROPERTY LINE
- - - 220 CONTOUR
- EDGE OF ROAD
- FENCE LINE
- BUILDING LINE
- OHE OVERHEAD ELECTRIC
- EXISTING TREES
- + LIGHT POLE
- UTILITY POLE
- ⊙ SEWER CLEANOUT
- ⊕ APPROVED PERCOLATION TEST
- ▲ EXISTING WELL

Approved Septic System Plan
 Howard County Health Department
 Hank Oswald
 Signature Date



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE

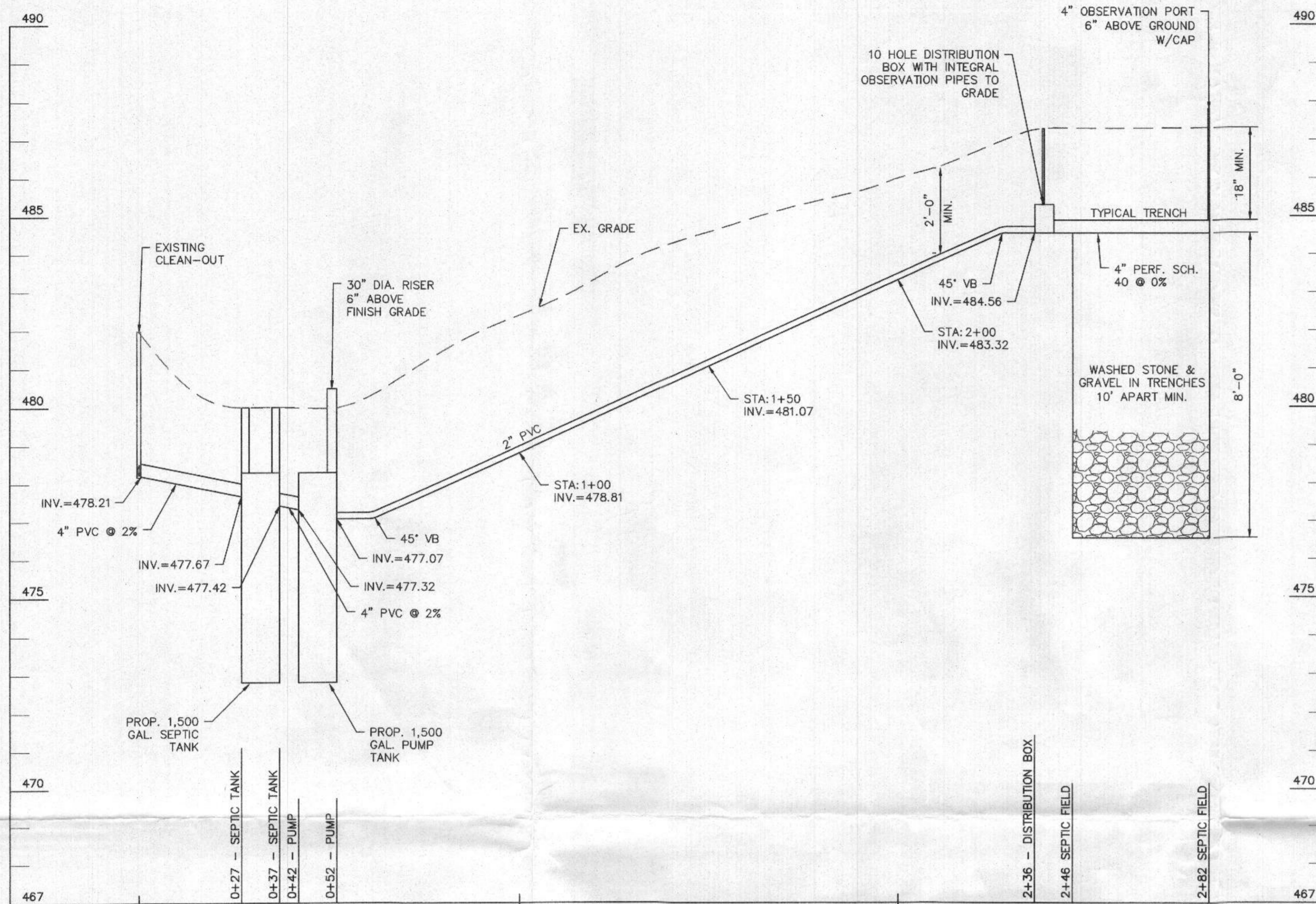


OSDS PLAN
 SCALE: 1"=20'

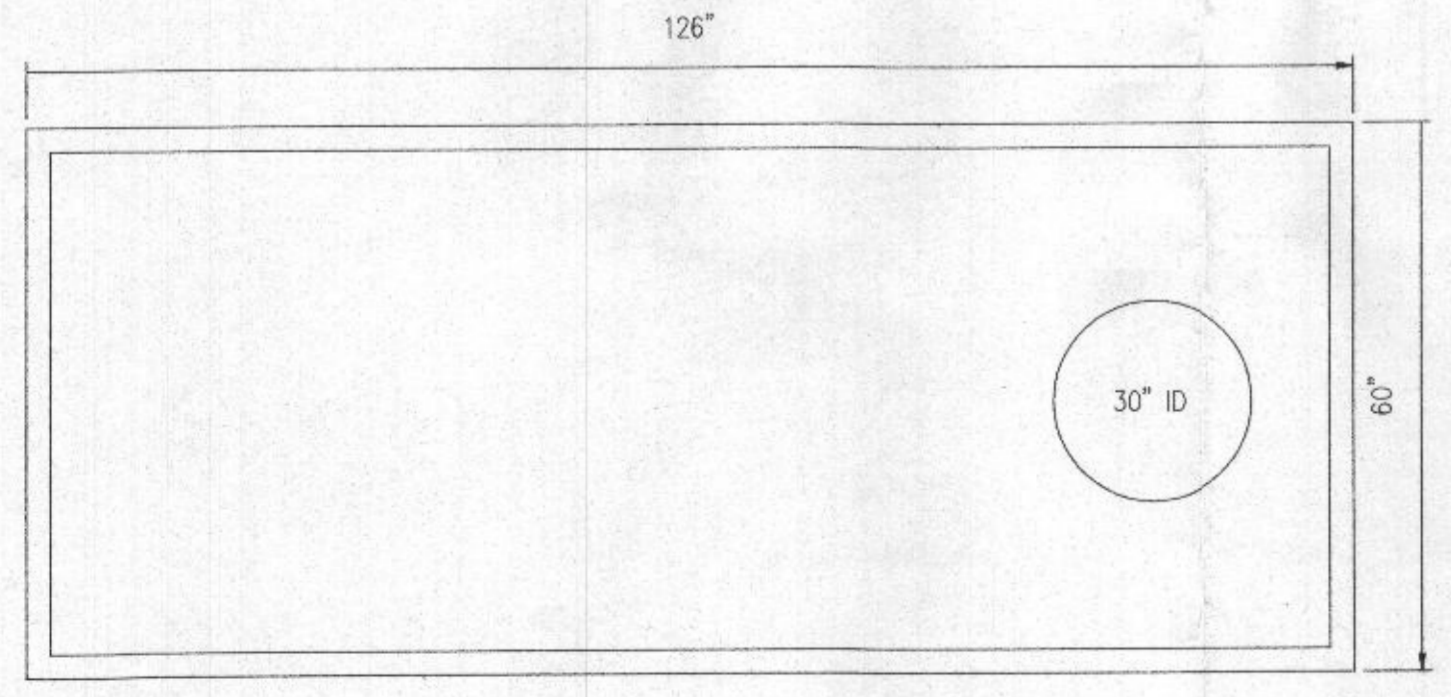
SEWAGE DISPOSAL SYSTEM DESIGN SPECIFICATIONS/CALCULATIONS

INITIAL SYSTEM / 1st & 2nd REPLACEMENT SYSTEM	3rd REPLACEMENT SYSTEM
APPLICATION RATE = 0.8	APPLICATION RATE = 0.6
DESIGN FLOW = 150gal/day x 5 BEDROOM = 750 gal/day	DESIGN FLOW = 150gal/day x 5 BEDROOM = 750 gal/day

GRAPHIC SCALE

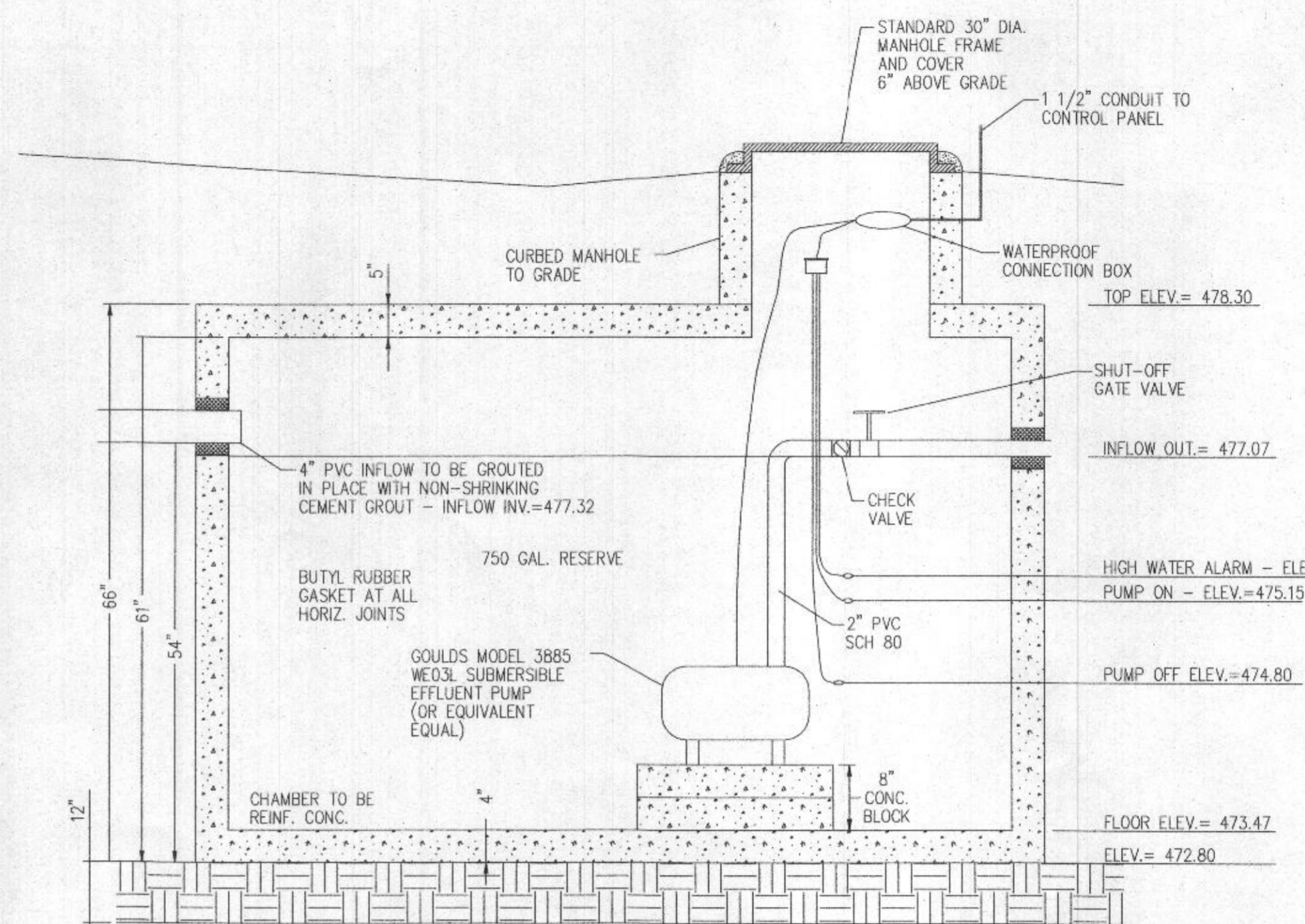


SEPTIC PROFILE
SCALE: HOR: 1"=20'
VERT: 1"=2'



PLAN VIEW

NOTE: BUILDING SEWER, SEPTIC TANK AND PUMP CHAMBER SHALL BE INSTALLED IN CLASS 1 FILL MATERIAL.



1500 GALLON PUMP TANK

NOTES:
CONCRETE STRENGTH 4000 PSI AT 28 DAYS
REINFORCING DETAIL: 6X6 #10 GAUGE WIRE
MESH: TOP HAS #3 BARS 6" O.C.; BOTTOM HAS #3 BARS 12" O.C.



GOULDS PUMPS
Wastewater

APPLICATIONS

Specifically designed for the following uses:
• Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS

Pump
• Solids handling capabilities: 1/2" maximum.
• Discharge size: 2" NPT.
• Capacities: up to 140 GPM.
• Total heads: up to 128 feet TDH.
• Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent.
• See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

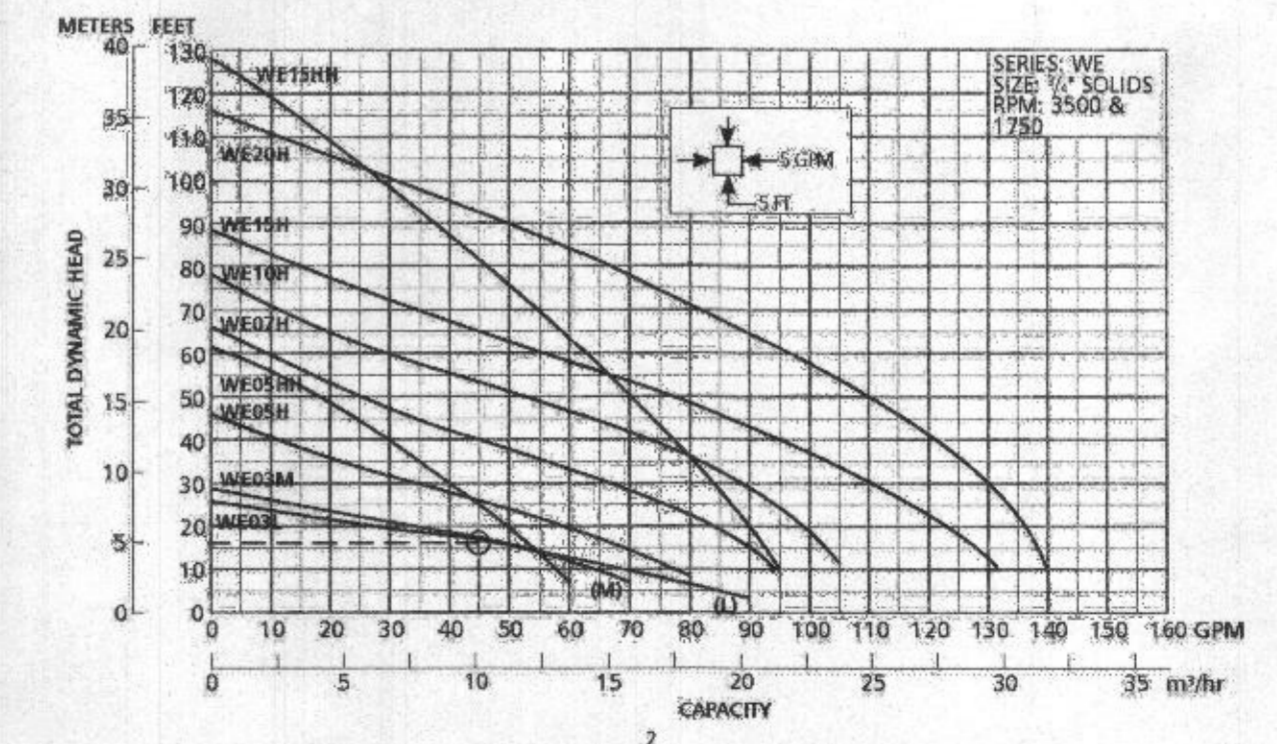
MOTORS

• Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
• Class B insulation on 1/2 - 1 1/2 HP models.
• Class F insulation on 2 HP models.
Single phase (60 Hz):
• Capacitor start motors for maximum starting torque.
• Built-in overload with automatic reset.
• SITOW or STOW severe duty oil and water resistant power cords.

• 1/2 - 1 HP models have NEMA three prong grounding plugs.
• 1 1/2 HP and larger units have bare lead cord ends.
Three phase (60 Hz):
• Class 10 overload protection must be provided in separately ordered starter unit.
• SITOW power cords all have bare lead cord ends.
• **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
• **Bearings:** Upper and lower heavy duty ball bearing construction.
• **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor and provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
• **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Tested to UL 779 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR3849
Goolds Pumps is ISO 9001 Registered.



SYSTEM CURVE

GOULDS PUMP MODEL 3885 WE0311L 1/3HP, 115V (OR EQUIVALENT EQUAL)
SEWAGE EFFLUENT PUMP - 1750 RPM, 1 PH.

NOTE: SWITCH GEAR SHALL BE PROVIDED FOR OPERATION OF PUMPS AND HIGH WATER ALARM SQUARE "D" ELECTRIC PANEL

DESIGN DATA

2	DIAMETER OF FORCE MAIN (INCHES)
184	TOTAL PIPE LENGTH (FEET)
3.27	FRICITIONAL LOSS PER 100 FEET OF PIPE
6.0	FRICITIONAL LOSS FOR SYSTEM (TOTAL PIPE LENGTH TIMES FRICTION LOSS PER 100 FEET OF PIPE)
9.8	STATIC HEAD LOSS (HIGHEST FORCE MAIN ELEVATION MINUS PUMP OFF ELEVATION)
15.8	TOTAL HEAD LOSS (FRICITIONAL LOSS + STATIC HEAD LOSS)
45	GALLONS PUMPED PER MINUTE
130	VOLUME OF DRAWDOWN, GALLONS (PUMP ON MINUS PUMP OFF)
1/3	REQUIRED PUMP SIZE (HORSEPOWER)
2.88	DRAWDOWN TIME: 2 MINUTES 53 SECONDS @ 45 GAL/MIN.



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 33772 EXP. DATE: 06/16/2019

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS
HEALTH OFFICER, HOWARD COUNTY HEALTH DEPT. DATE

KCI TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
11830 WEST MARKET PLACE
SUITE F
FULTON, MD 20759
TELEPHONE: (410) 792-8086
FAX: (410) 792-7419

REVISIONS			
NO.	DATE	DESCRIPTION	BY

CHERRY TREE
7429 CHERRY TREE DRIVE, FULTON MD, 20759
ONSITE SEWAGE DISPOSAL SYSTEM
NOTES AND DETAILS

DATE: 03/28/2019
SCALE: 1"=20'
DESIGNED BY: BRA
CHECKED BY: THM

TAX MAP: 41 GRID: 14 PARCEL: 318 ZONED: RR-DEO
HOWARD COUNTY MARYLAND (20759)

DRAWING NO. **SW-2**
SHEET 2 OF 2
KCI JOB NUMBER 271800113