

GRAYS COUNTY HEALTH DEPARTMENT
ON-SITE SEWAGE DISPOSAL SYSTEM DESIGN

SITE #: _____ PARCEL #: 77400000105
 DATE SUBMITTED: 9/3/2025 LEGAL/LOT #: _____
 SUBMITTED BY: ADAM HUNTER
 APPLICANT: OLEG PANKRATOV
 ADDRESS: 921 RIVER ST
 HOQUIAM, WA 98550

I. CALCULATIONS

NUMBER OF BEDROOMS = 2
 RESIDENTIAL GPD FLOW = 240
 IF NON-RESIDENTIAL - GPD FLOW
 WILL BE AS FOLLOWS:
 GPD=

APPLICATION RATE = 0.6 GPD/FT2
 REDUCTION = LEAVE BLANK IF NO REDUCTION TAKEN

DRAINFIELD SIZING

ABSORPTION AREA = 400 FT2
 TRENCH LENGTH OR BED CONFIG. = 13.5'X30'
 PER OSCAR

II. WATERPROOF SEPTIC TANK

COMPOSITION AND SIZE = 1500 GAL - CONCRETE
 NEW OR EXISTING = SEPTIC TANK (NO NUWATER)

III. DRAINFIELD CROSS SECTION

SAND DEPTH = 0' - 6"

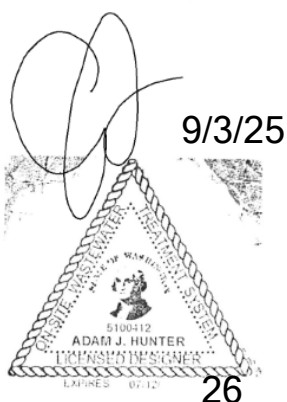
IV. PRESSURE CALCULATIONS

USING PIPE CLASS 40
 ORIFICE NETAFIM DRIPLINE

SECTION	LENGTH (FT)	DIAMETER (IN)	FLOW (GPM)	FRICTION LOSS (FT)
SUPPLY	30.00	1.00	12.000	2.3263
RETURN	30.00	1.00	12.000	<u>2.3263</u>
TOTAL =				4.6526



**** TOTAL HEAD LOSS ****

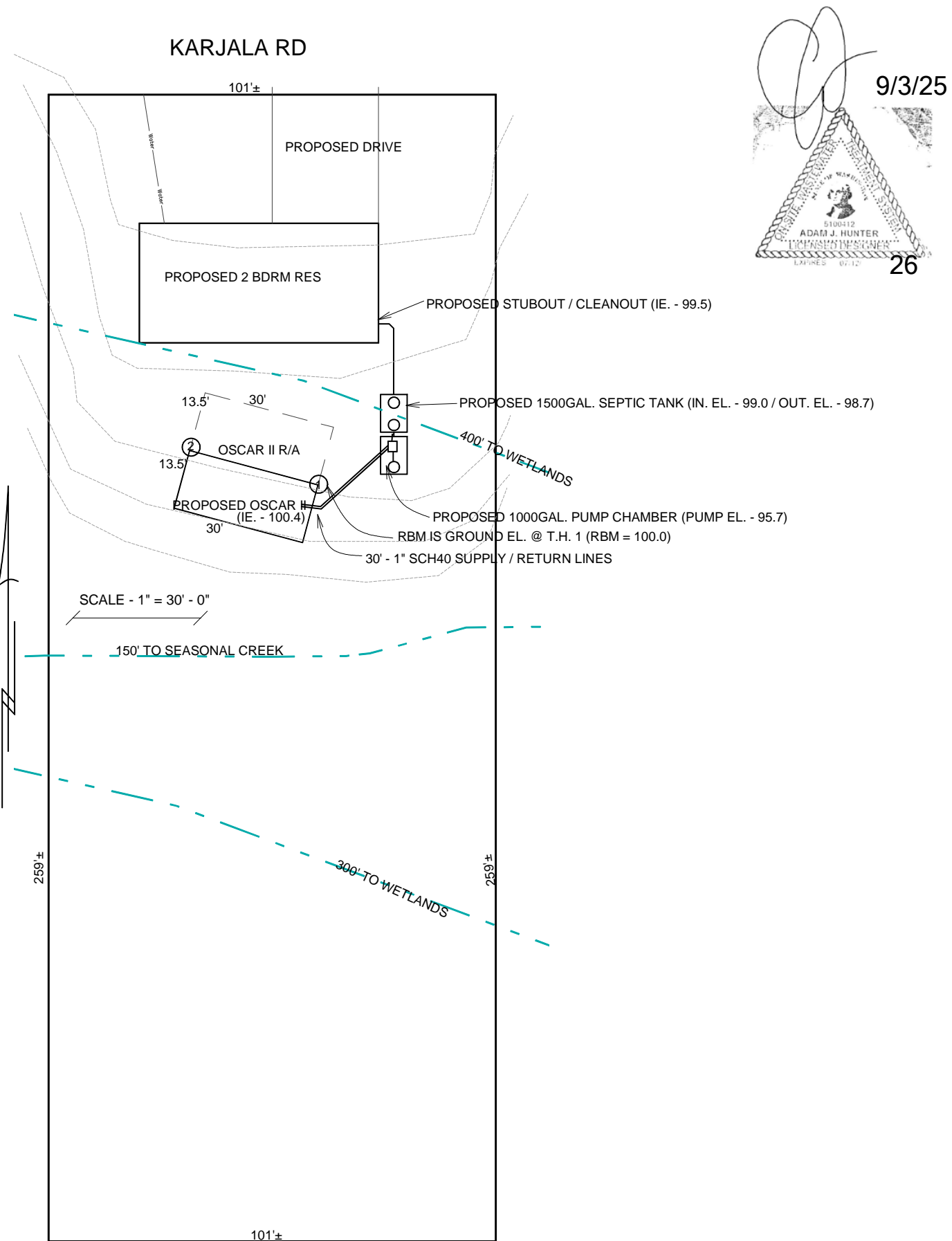
1) FRICTION LOSS THROUGH SYSTEM =	4.653
2) ELEVATION DIFFERENCE =	4.500
TOTAL =	<u><u>9.153</u></u>



V. CHECK THE PUMP CAPACITY.

PUMP: A.Y. MCDONALD 30GPM - 1/2HP PUMP (MODEL # 22050E2AJ) (PER OSCAR)
EXCESS TDH 50.00 (PER OSCAR)
TOTAL HEAD LOSS IN SYSTEM 9.15
STANDARD PUMP CONFIGURATION IS SUFFICIENT? **YES**


9/3/25

26

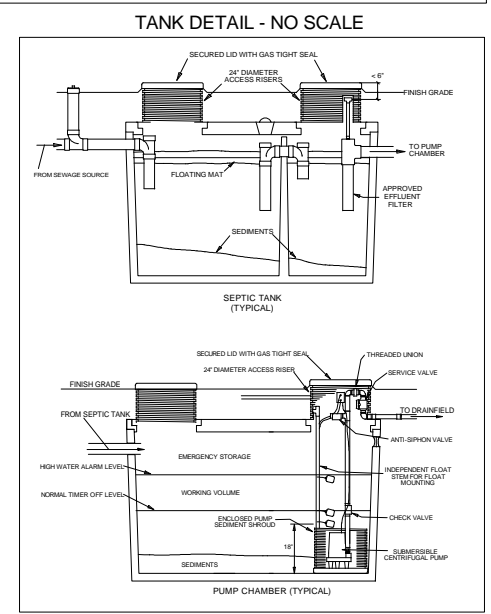


NOTES:

- RESTRICTIVE LAYER BELOW 24"
- FIVE TIMES RULE MET
- NO WELLS WITHIN 100' OF DRAINFIELD
- ELAPSE TIME METER AND EVENT COUNTER REQUIRED
- RISERS TO SURFACE REQUIRED OVER ALL TANK LIDS

SOIL LOGS

1)	GRAVELLY SANDY LOAM	0 - 24"
2)	GRAVELLY SANDY LOAM	0 - 26"

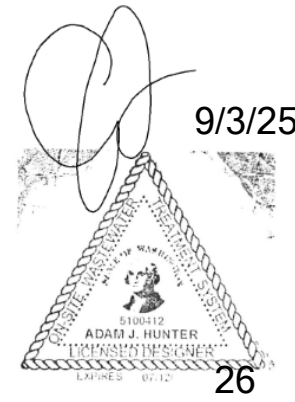
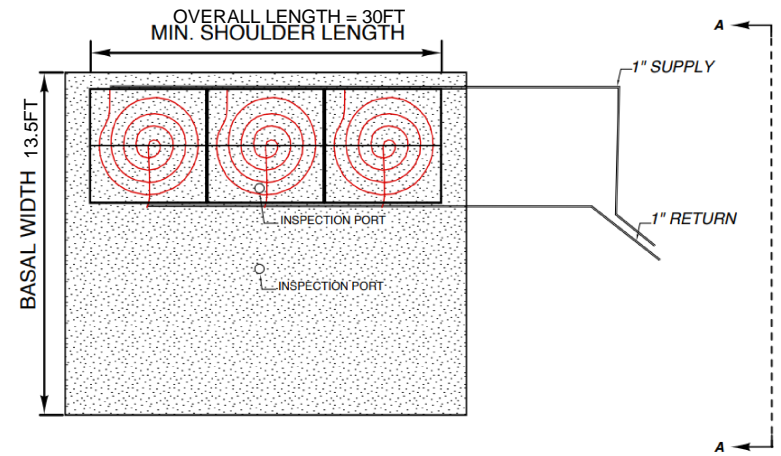


THIS IS NOT A SURVEY:
 SITE FEATURES, TOPOGRAPHY, ELEVATIONS AND BENCHMARKS ARE BASED ON ASSUMED DATUM PROVIDED BY THE OWENER AND COUNTY PLANNING RECORDS AND ARE INTENDED ONLY FOR THE REVIEW AND CONSTRUCTION OF THE PROPOSED SEPTIC SYSTEM DESIGN. JIM HUNTER & ASSOCIATES RECOMMENDS THAT A LICENSED PROFESSIONAL LAND SURVEYOR ALWAYS BE USED TO SET CORNER, ESTABLISH LOT LINES, DETERMINE ELEVATIONS AND TOPOGRAPHY AND / OR PROVIDE A LEGAL SITE PLAN. NAVD88 IS UNKNOWN

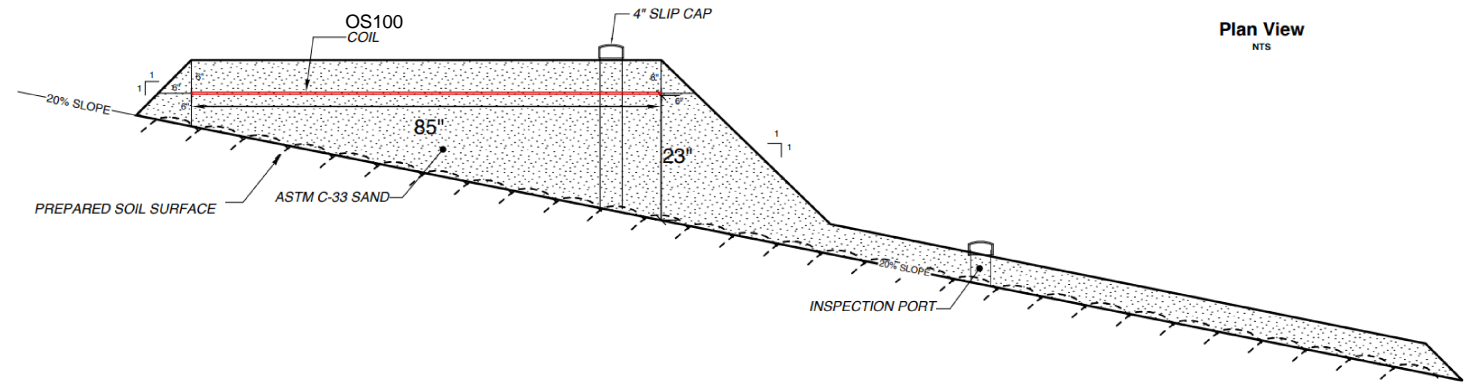
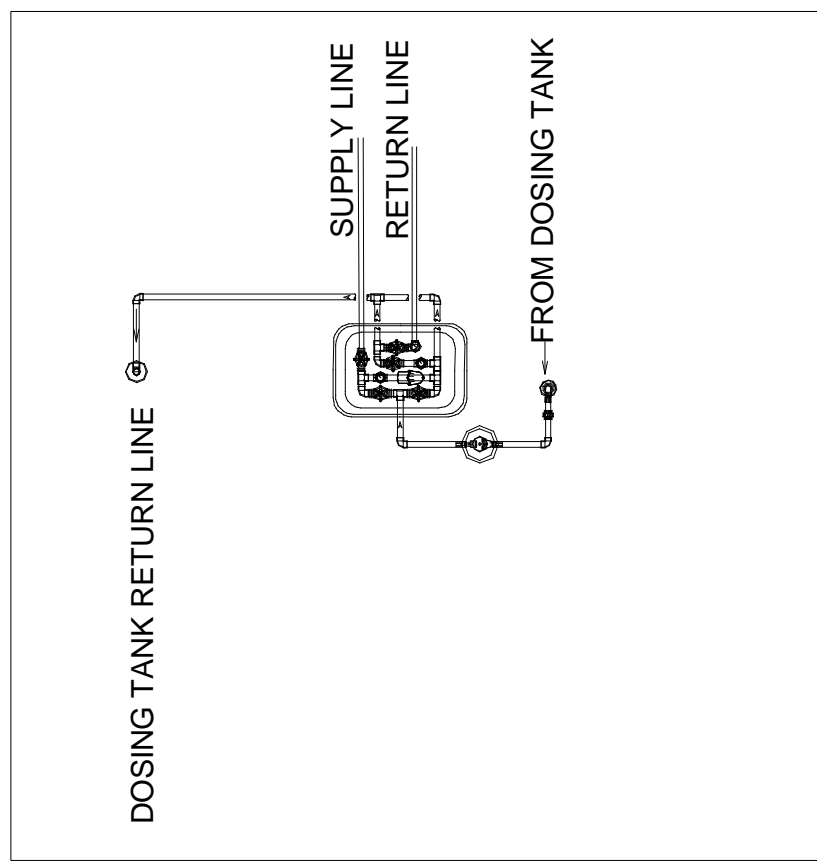
A FEE MAY BE CHARGED AFTER INSTALLATION FOR FINAL INSPECTION & RECORD DRAWING

HWY 12 TO A LEFT ON HILL TO A RIGHT ON KARJALA TO SITE ON THE LEFT		JIM HUNTER AND ASSOCIATES P.O. BOX 162, OLY, WA 98507 753-1226 JHANDASSOCIATES@HOTMAIL.COM	
		DESIGNER - ADAM HUNTER	
		SEPTIC SYSTEM DESIGN FOR -	
		OLEG PANKRATOV	
		SITE ADDR -	
		6699 KARJALA RD	
		LEGAL -	
		TP# 77400000105	SITE #
KARJALA		HILL	
		1 OF 2	

OS-300-7S



HWN-.7-RF - AUTOMATIC HEADWORKS DETAIL - NO SCALE



Plan View
NTS

Section A
NTS

OSCAR HEADWORKS SETUP:
 Place valve 1 & 2 toggle switch and pump 1 toggle switch to MAN position.
 Pump should dose and all three pressure gauges should stabilize about 50 psi.
 Gauge 3 may read as low as 40 psi. No water should be flowing into septic tank.
 Place valve 3 & 4 toggle switch to MAN and valves 1 & 2 toggle switch to OFF,
 pump #1 in MAN. Pump should run, pressures should change: gauge 2 highest
 pressure, gauge 1 less than 2, and gauge 3 should indicate 0 psi. Water should
 be flowing into septic tank very rapidly.
 Place valves 1 & 2 and valve 5 in MAN position and valves 3 & 4 in OFF position,
 and pump 1 in MAN. Pressure on gauge 1 & 2 should indicate about the same
 pressure, and gauge three should indicate between 0-3 psi and water should be
 flowing into septic tank at a moderate rate.
 Position all toggle switches to AUTO.
 c. Check timer default settings:
 V1 OFF = 3 minutes 38 seconds
 V1 ON = 22 seconds
 V2 OFF = 30 seconds
 V2 ON = 15 seconds
 V1V3 OFF = 30 seconds
 V1V3 On = 2 minutes

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LEGAL -	2 OF 2
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