

OWNER'S INFORMATION

OWNER:
IMI SOMOGYI
18000 REDWOOD DRIVE
LOS GATOS, CA, 94033

APN: 544-37-001

REFERENCES

THIS ENGINEERED OWTS PLAN IS SUPPLEMENTAL TO:

- TOPOGRAPHIC SURVEY BY LEA & BRAZE ENGINEERING, INC. ENTITLED:
"TOPOGRAPHIC SURVEY"
18000 REDWOOD DRIVE
LOS GATOS, CA
JOB# 2200718
- SITE PLAN BY ACADIA ARCHITECTURE ENTITLED:
"SITE PLAN"
18000 REDWOOD DRIVE
LOS GATOS, CA

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

GENERAL INSTALLATION NOTES:

PERMITS:
CONSTRUCTION OF THE SEWAGE DISPOSAL SYSTEM SHALL NOT COMMENCE WITHOUT WRITTEN APPROVAL FROM TOWN OF SAN MARTIN AND SANTA CLARA COUNTY ENVIRONMENTAL HEALTH SERVICES.

PLAN CHANGES:
CHANGES TO THE PLANS OR SPECIFICATIONS SHALL BE MADE ONLY AFTER CONSULTATION WITH AND APPROVAL OF THE DESIGNER AND PERMITTING AGENCY.

INSTALLATION:
ALL INSTALLATION WORK SHALL BE IN ACCORDANCE WITH TOWN OF SAN MARTIN AND SANTA CLARA COUNTY SEWAGE DISPOSAL ORDINANCES.

LOCATION OF THE SEPTIC TANK AND LEACHING TRENCHES:
LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO ADJUSTMENT IN THE FIELD BY DESIGNER WITH APPROVAL OF THE PERMITTING AGENCY. TRENCHES SHALL BE INSTALLED ALONG LEVEL CONTOUR TO ENSURE THE TRENCH BOTTOM IS MAINTAINED LEVEL THROUGHOUT THE ENTIRE LENGTH. A TRIPOD-MOUNTED LASER SHALL BE REQUIRED ON SITE.

TRENCHING NOTE:
ALL TRENCHING FOR THE PROPOSED LEACHFIELDS WITHIN THE DRIPLINES OF ANY SIGNIFICANT TREE WILL BE DONE BY HAND UNDER THE SUPERVISION OF THE PROJECT ARBORIST

SANTA CLARA COUNTY OWTS SETBACKS:		
MINIMUM DISTANCES (IN FEET) MEASURED FROM:	DISPOSAL FIELD	SEPTIC TANK
ALL WELLS AND SPINGS	100'	100'
WATERCOURSES* (TOP OF BANK)	100'	100'
RESERVOIRS (HIGHWATER MARK)	200'	200'
CUT OR STEEP EMBANKMENTS (TOP OF CUT)	4 X H**	10 FEET
STEEP SLOPES***	4 X H**	10 FEET
DRAINAGE/SWALE	50'	50'
FOUNDATION	10'	5'
PROPERTY LINE	10'	10'
SEPTIC TANKS	6'	N/A
SWIMMING POOL	10'	10'
ROAD EASEMENT, PAVEMENT, OR DRIVEWAY	5'	5'
PONDS AND LANSLIDES	100'	100'

* WATERCOURSE - A RUNNING STREAM FED FROM PERMANENT OR NATURAL SOURCES, INCLUDING RIVERS, CREEKS, RUNS, AND RIVULETS. THERE MUST BE A STREAM, USUALLY FLOWING IN A PARTICULAR DIRECTION (THROUGH IT NEED NOT FLOW CONTINUOUSLY) IN A DEFINITE CHANNEL, HAVING A BED OR BANKS AND USUALLY DISCHARGING INTO SOME STREAM OR BODY OF WATER.

** H EQUALS THE HEIGHT OF UT OR EMBANKMENT IN FEET. THIS SETBACK DISTANCE REQUIREMENT MUST NOT BE LESS THAN 25 FEET OR MORE THAN 100 FEET.

*** AS DEFINED BY THE REGIONAL WATER QUALITY CONTROL BOARD HAVING JURISDICTION, BUT NOT EXCEEDING 67 PERCENT.

(M) NO PRIVATE SEWAGE DISPOSAL SYSTEM MAY BE APPROVED ON ANY PARCEL OF LAND WHERE PERCOLATION RATE EXCEEDS 120 MIN/INCH OR IS LESS THAN ONE MIN/INCH.

(N) NO PART OF ANY PRIVATE SEWAGE DISPOSAL SYSTEM MAY CROSS ANY PROPERTY LINE.

(O) UPON NOTICE FROM THE DIRECTOR THAT WORK ON THE SEWAGE DISPOSAL SYSTEM IS BEING CONDUCTED IN VIOLATION OF THIS CHAPTER, OR IN AN UNSAFE OR DANGEROUS MANNER, THE WORK MUST BE IMMEDIATELY STOPPED. THE STOP-WORK MUST BE ISSUED TO THE OWNER OF THE PROPERTY INVOLVED, OR THE OWNER'S AGENT, OR THE PERSON DOING THE WORK. IT MUST STATE THE CONDITIONS UNDER WHICH WORK MAY BE RESUMED. NO PRIVATE SEWAGE DISPOSAL SYSTEM MAY BE APPROVED ON ANY PARCEL OF LAND WHERE PERCOLATION RATE EXCEEDS 120 MIN/INCH OR IS LESS THAN ONE MIN/INCH.

GENERAL INSTALLATION NOTES:

PERMITS:
CONSTRUCTION OF THE SEWAGE DISPOSAL SYSTEM SHALL NOT COMMENCE WITHOUT WRITTEN APPROVAL FROM CITY OF SARATOGA AND SANTA CLARA COUNTY ENVIRONMENTAL HEALTH SERVICES.

PLAN CHANGES:
CHANGES TO THE PLANS OR SPECIFICATIONS SHALL BE MADE ONLY AFTER CONSULTATION WITH AND APPROVAL OF THE DESIGNER AND PERMITTING AGENCY.

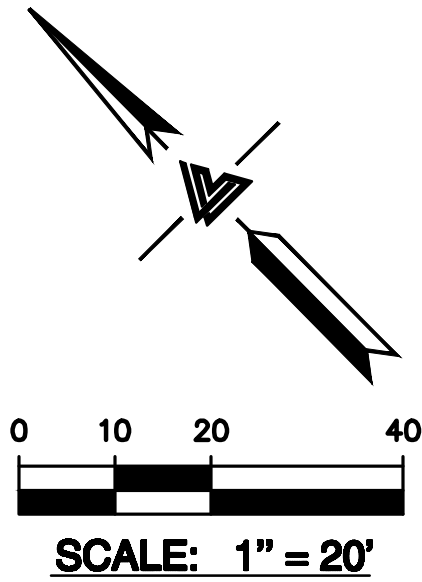
INSTALLATION:
ALL INSTALLATION WORK SHALL BE IN ACCORDANCE WITH CITY OF SARATOGA AND SANTA CLARA COUNTY SEWAGE DISPOSAL ORDINANCES.

CONSTRUCTION INSPECTION SCHEDULE

LEA & BRAZE IS REQUIRED TO PERFORM SEVERAL CONSTRUCTION INSPECTIONS DURING THE INSTALLATION OF THIS SYSTEM. THE COUNTY MAY ALSO INSPECT SOME OF THESE ELEMENTS AND MAY DO SO SIMULTANEOUSLY. THE FOLLOWING SCHEDULE SHOWS THE MINIMAL AMOUNT OF INSPECTION TO BE PERFORMED BY LEA & BRAZE:

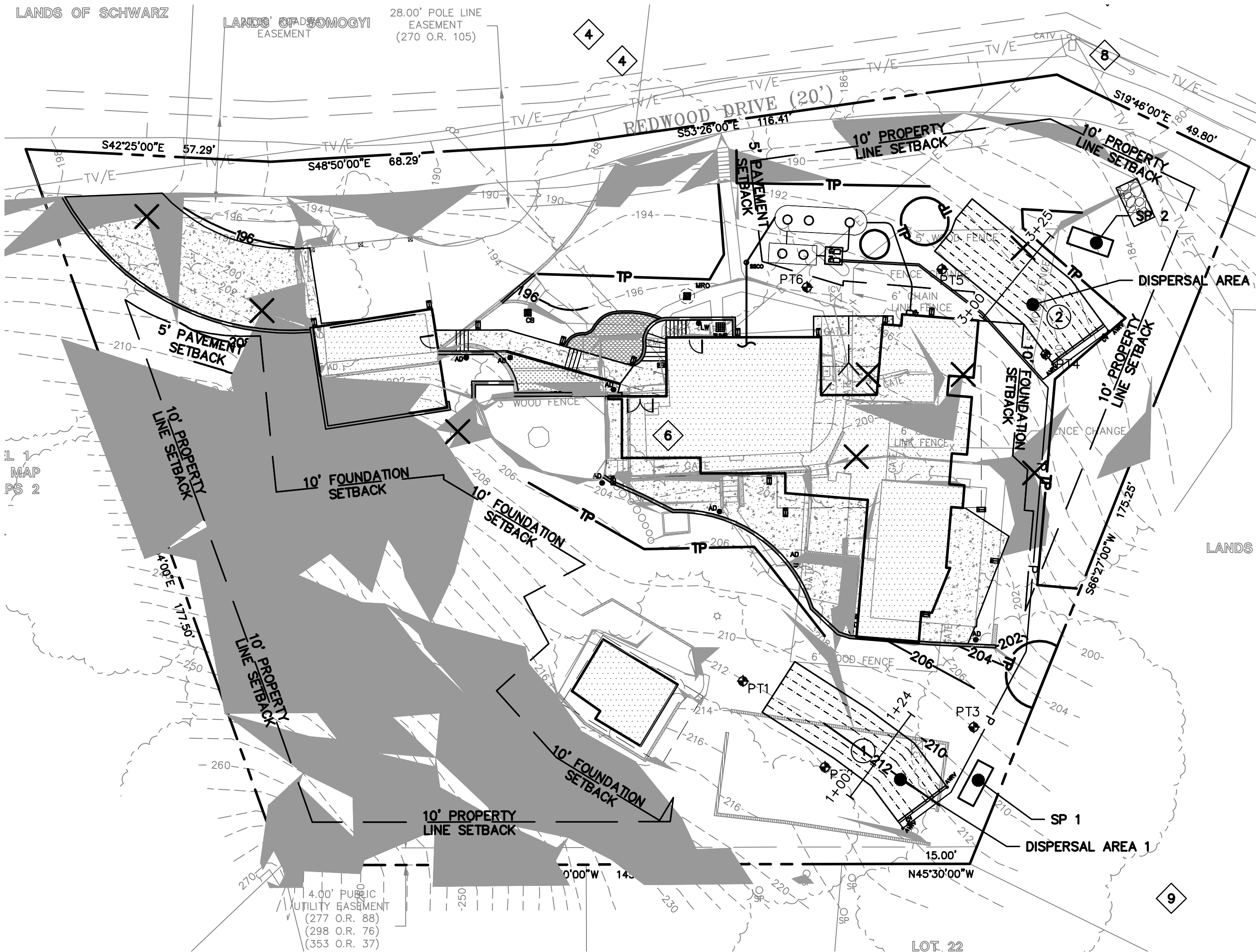
- PRECONSTRUCTION INSPECTION -
A. THE LOCATION OF ALL COMPONENTS OF THE SYSTEM WILL BE MARKED ON THE GROUND, AND ANY ISSUE DISCUSSED AND RESOLVED BEFORE INSTALLATION BEGINS.
B. INSTALLATION PROCEDURES WILL ALSO BE AGREED TO AT THIS POINT.
- CHECK WATER TIGHTNESS OF TANKS.
- INSPECTION OF TRENCH EXCAVATION.
- INSPECTION OF ROCK AND ITS PLACEMENT.
- PIPE INSTALLATION AND JOINT INSPECTION AND SQUIRT TEST.
- FLOAT SETTING AND ALARM AND CONTROL PANEL, AND OPERATION OF PUMP INSPECTION.
- SINGULAR INSPECTION AND SINGULAR CONTROL PANEL INSPECTION AND PROGRAMMING
- FINAL INSPECTION TO DETERMINE THAT ALL WORK AS BEEN DONE, ALL EQUIPMENT IS WORKING WELL AND THE EROSION CONTROL FEATURES HAVE BEEN INSTALLED CORRECTLY.
- CONTRACTOR TO PROVIDE AS-BUILT PLANS AND ENGINEER TO PROVIDE REVIEW LETTER FOR RECORD.

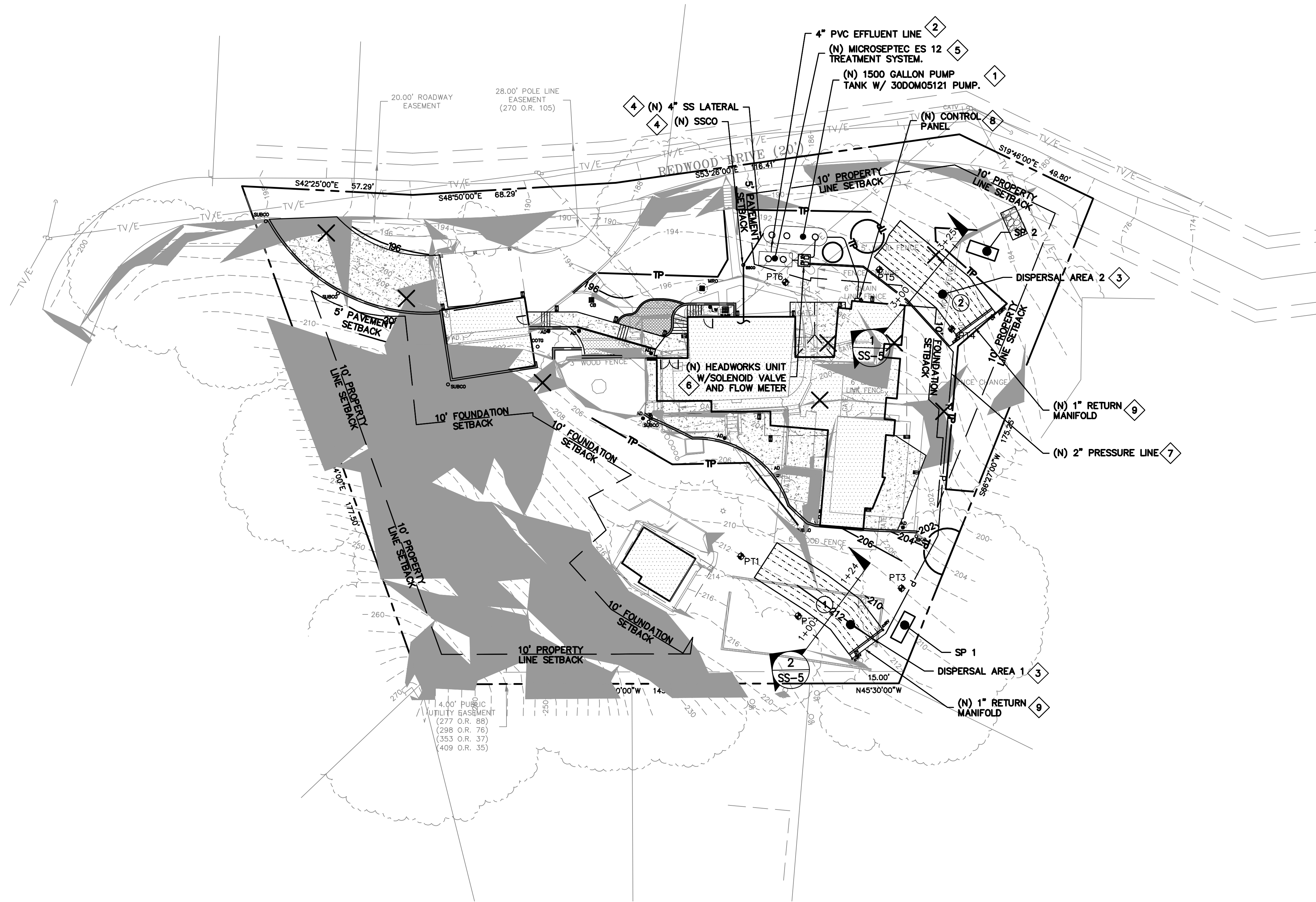
ENGINEERED PLANS FOR ON-SITE WASTEWATER TREATMENT SYSTEM (OWTS) 18000 REDWOOD DRIVE LOS GATOS, CALIFORNIA



ABBREVIATIONS

AD	AREA DRAIN
BFP	BACKFLOW PREVENTOR
CB	CATCH BASIN
CL	CENTER LINE
CO	CLEANOUT
DIV	DIVERSION VALVE
E	EFFLUENT
ELEV	ELEVATIONS
(E)	EXISTING
FL	FLOW LINE
INV	INVERT ELEVATION
JT	JOINT TRENCH
LN	LANDING
MM AX	MAXIMUM
MIN	MINIMUM
(N)	NEW
NTS	NOT TO SCALE
O.C.	ON CENTER
R	PROPERTY LINE
RIM	RIM ELEVATION
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STD	STANDARD
TW/FG	TOP OF WALL/FINISH GRADE
TYP	TYPICAL
W/	WITH
WL	WATER LINE





INSPECTION WELL NOTE:
THREE INSPECTION STANDPIPES SHALL BE INSTALLED WITHIN AND AROUND TRENCH SYSTEMS.
ONE (1) SHALL BE LOCATED UPSLOPE OF THE DISPERSAL FIELD (10-15' AWAY).
ONE (1) SHALL BE LOCATED WITHIN THE DISPERSAL FIELD (TYPICALLY BETWEEN TRENCHES AND NEAR CENTER OF FIELD).
ONE (1) SHALL BE LOCATED DOWN-SLOPE OF THE DISPERSAL FIELD (10-15' AWAY).

SEPTIC SYSTEM KEYNOTES 1 TO 9

1. INSTALL (N) MICROSEPTIC ES-12 TREATMENT UNIT SEE DETAIL ON SHEET SS-6.
2. INSTALL (N) 1500-GALLON NORWESCO PUMP TANK. SEE DETAIL ON SHEET SS-3.
3. INSTALL PRIMARY AND SECONDARY (N) PRESSURE DOSING TRENCHES AT THE LENGTHS SHOWN - SEE DETAILS ON SHEET SS-5.
4. INSTALL (N) 4" PVC SANITARY SEWER LATERALS. PROVIDE (N) SANITARY SEWER CLEANOUT TO GRADE AT BUILDING AND AT MAJOR CHANGES OF DIRECTION AS SHOWN.
5. INSTALL (N) 4" PVC EFFLUENT LINE TO CONNECT THE SEPTIC TANK TO THE PUMP TANK - SEE DETAILS ON SHEET SS-6.
6. (N) HEADWORKS UNIT W/ SOLENOID VALVE AND FLOW METER TO CONNECT TO SEPTIC TANK, PUMP AND TREATMENT SYSTEM-SEE DETAIL ON SHEET SS-4
7. INSTALL (N) 2" PRESSURE LINE FROM PUMP TO (N) LATERAL SHUTOFF/ADJUSTMENT VALVE CONNECTED TO THE DISPERSAL TRENCH - SEE DETAIL ON SHEET SS-6.
8. INSTALL (N) CONTROL PANEL THROUGH ELECTRICAL CONNECTIONS FROM THE HOUSE TO THE PUMP TANK - SEE DETAILS ON SHEET SS-4.
9. INSTALL (N) AIR VACUUM RELIEF VALVE AND CHECK VALVE TO BE CONNECTED TO THE 1" SUPPLY AND RETURN VALVE FOR THE DISPERSAL FIELDS.

DRIP DISPERSAL FIELD LENGTH CALCULATIONS:

PERCOLATION RATE BASED ON FIELD DATA WAS OBSERVED TO BE 9 MPI. IN ACCORDANCE WITH TABLE 1 (SECTION 3 BACK OF PAGE 3-18) OF THE SANTA CLARA COUNTY ONSITE SYSTEMS MANUAL THE APPLICATION RATE IS 0.88 GPD/SQFT.

HOME IS PROPOSED WITH 4 BEDROOMS, THEREFORE, WASTEWATER FLOW IS 525 GAL/DAY PER TABLE 3-1 (SECTION 3) OF THE SANTA CLARA COUNTY ONSITE SYSTEMS MANUAL.

REQUIRED LENGTH CALCULATED BY THE EQUATION SUPPLIED ON PAGE 3-17 OF THE SANTA CLARA COUNTY ONSITE SYSTEMS MANUAL (SECTION 3) THAT STATES:

REQUIRED INFILTRATIVE AREA = $(525/0.88)$ = 597 SQ. FT.
REQUIRED NUMBER OF EMITTERS = 150 EMITTERS

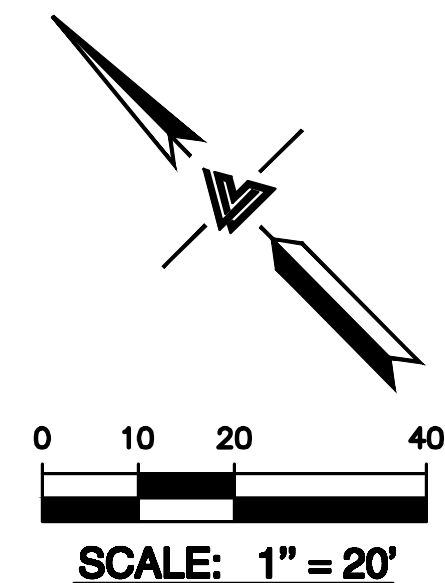
REQUIRED DRIPFIELD AREA AND THE NUMBER OF EMITTERS (OWTS ORDINANCE REQUIRES 2 100% FIELD "PRIMARY AND SECONDARY"):

TOTAL DRIPFIELD AREA REQUIRED = 1,194 SQ. FT.

TOTAL NUMBER OF EMITTERS = 300 EMITTERS

SEE DISPERSAL TRENCH TABLE ON SHEET SS-2 FOR BREAKDOWN OF DRIPFIELD AREA PROVIDED IN EACH FIELD.

DISPERSAL FIELD TABLE	
#	PRIMARY OR SECONDARY DISPERSAL FIELD (MINIMUM AREA REQUIRED)
1	PRIMARY AREA 610 SQ. FT. 305 LINEAR FEET 152 EMITTERS
2	SECONDARY AREA 604 SQ. FT. 322 LINEAR FEET 161 EMITTERS



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
REGIONAL OFFICES:
MAIN OFFICE: 18000 REDWOOD DRIVE, WEST GATOS, CALIFORNIA 94545
SAN JOSE
(510) 887-4086
WWW.LEABRAZE.COM

SOMOGYI RESIDENCE
18000 REDWOOD DRIVE
LOS GATOS, CALIFORNIA

APN: 544-37-001

UNINCORPORATED SANTA CLARA COUNTY

SEPTIC SYSTEM PLAN

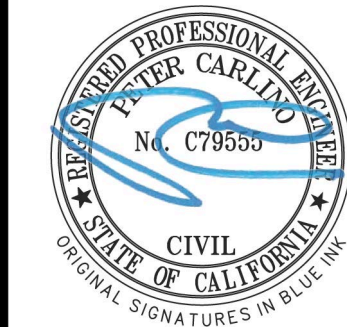
-	-
-	-
-	-
-	-
-	-
REVISIONS	BY
JOB NO:	2201112
DATE:	03-09-21
SCALE:	1" = 20'
DESIGN BY:	KBC
CHECKED BY:	JH
SHEET NO:	OWTS SS-2
02 OF 07 SHEETS	

LEACH FIELD 1 CALCULATIONS
FROM GEOFLOW EXCEL DESIGN SPREADSHEET

Worksheet 1- Field Flow				Worksheet - Pump Sizing			
Total field				Section 1 - Summary from Worksheet 1			
Total Quantity of effluent to be disposed per day	525	gallons / day		Flow required to dose field	1.35	gpm	
Hydraulic loading rate	0.88	gallons / sq. ft. / d		Flow required to flush field	8.88	gpm	
Minimum Dispersal Field Area	597	square ft.		Flow required to dose & flush field	10.23	gpm	
Total Dispersal Field Area	610	square ft.		Filter	BioDisc Filter-160		
Flow per zone				No. of Zones			
Number of Zones	1	zone(s)		Zone valve	-		
Dispersal area per zone	610	square ft.		Dripline	Wasteflow PC - 1/2gph		
Choose line spacing between WASTEFLOW lines	2	ft.		Dripline longest lateral	45.00	ft.	
Choose emitter spacing between WASTEFLOW emitters	2	ft.		Section 2			
Total linear ft. per zone (minimum required)	305	ft. per zone				ft of head	Pressure
Total number of emitters per zone	153	emitters per zone		A. Flush line - Losses through return line			
Select Wasteflow dripline (16mm)	Wasteflow PC - 1/2gph	dripline		Select Pipe from dropdown menu	PVC schedule 40		
	Wasteflow Classic			Select Flush Line Diameter	1/2" inch		
	Wasteflow PC - 1/2gph			Length of return line	172	ft.	
	Wasteflow PC - 1 gph			Equivalent length of fittings	5	ft.	
Pressure at the beginning of the dripline	25	psi		Elevation change, (if downhill enter 0)	8	ft.	
Feet of Head at the beginning of the dripline	57.75	ft.		Pressure loss in 100 ft of pipe	64.26	ft.	27.82 psi
What is the flow rate per emitter in gph?	0.53	gph		Total pressure loss from end of dripline to return tank	121.7	ft.	52.70 psi
Dose flow per zone	1.35	gpm		B. Dripline - Losses through Wasteflow dripline			
Note: A few States or Counties require additional flow for flushing. Please check your local regulations. Flush velocity calculation below is for PC dripline. Classic dripline requires less flow to flush than P.				Length of longest dripline lateral	45	ft.	
Please refer to GeoFlow's spreadsheet "Design Flow and Flush Curves" at www.geoflow.com or call:				Minimum dosing pressure required at end of dripline	121.74	ft.	52.70 psi
If required, choose flush velocity	1	ft/sec		Loss through dripline during flushing	0.12	ft.	0.05 psi
How many lines of WASTEFLOW per zone?	12	lines		Total minimum required dripline pressure	121.85	ft.	52.75 psi
Fill in the actual length of longest dripline lateral	45	ft.		A+B. Minimum Pressure required at beginning of dripline			
Flush flow required at the end of each dripline	0.74	gpm		CALCULATED pressure required at beginning of dripline	243.59	ft.	105.45 psi
Total Flow required to achieve flushing velocity	8.88	gpm		SPECIFIED pressure at beginning of dripline (from v	57.8	ft.	25.00 psi
Total Flow per zone- worst case scenario	10.23	gpm		!!! Urgent revision required SPECIFIED pressure must be greater than CALCULATED pressure and			
Select Filters and zone valves				C. Drip components - Losses through headworks			
Select Filter Type	BioDisc Filter			Filter	11.6	ft.	5.00 psi
Recommended Filter (item no.)	BioDisc Filter-160	1.5in < 30 gpm		Zone valve pressure loss (not in diagram)	-	ft.	- psi
Select Zone Valve Type	Hydraulic			Flow meter pressure loss (not in diagram)	-	ft.	- psi
Recommended Zone Valve (item no.)	0			Other pressure losses	-	ft.	- psi
Note: minimum pressure of 25 psi required for Hydraulic valves. Check pressure in Cell D28.				Total loss through drip components	11.55	ft.	5.00 psi
Dosing				D. Supply line - Minimum Pressure head required to get from pump tank to top of dripline			
Number of doses per day / zone:	12	doses		Select Pipe from dropdown menu	PVC schedule 40		
Timer ON. Pump run time per dose/zone:	32.29	mins:secs		Select Supply line diameter	1-1/2" inch		
Timer OFF. Pump off time between doses	1.27	hrs:mins		Length of supply line	200	ft.	
Per Zone - Pump run time per day/zone:	6.29	hrs:mins		Equivalent length of fittings	5	ft.	
All Zones - Number of doses per day / all zones	12	doses / day		Elevation change, (if downhill enter 0)	-8	ft.	
Allow time for field to pressurize	0:00:30	hrs:mins:secs		Pressure loss/gain in 100 ft. of pipe	0.82	ft.	0.35 psi
Filter flush timer	0:00:20	hrs:mins:secs		Total gain or loss from pump to field	(1.3) ft.		(0.57) psi
Drain timer	0:05:00	hrs:mins:secs		Total dynamic head	68.0	ft.	29.43 psi
Field flush timer	0:01:00	hrs:mins:secs		Pump capacity * - Field Flush Flow	10.2	gpm	29.43 psi
Field flush counter	3	cycles		- Field Dose Flow	1.3	gpm	
Time required to complete all functions per day	7:51	hrs:mins		- Filter Flush Flow	-	gpm	- psi
Dose volume per zone	44	gallons per dose		Pump Model Number			
				Voltz / Hz / phase			

LEACH FIELD 2 CALCULATIONS
FROM GEOFLOW EXCEL DESIGN SPREADSHEET

Worksheet 1- Field Flow				Worksheet - Pump Sizing			
Total field				Section 1 - Summary from Worksheet 1			
Total Quantity of effluent to be disposed per day	525	gallons / day		Flow required to dose field	1.33	gpm	
Hydraulic loading rate	0.88	gallons / sq. ft. / d		Flow required to flush field	8.88	gpm	
Minimum Dispersal Field Area	597	square ft.		Flow required to dose & flush field	10.21	gpm	
Total Dispersal Field Area	604	square ft.		Filter	BioDisc Filter-150		
Flow per zone				No. of Zones			
Number of Zones	1	zone(s)		Zone valve	-		
Dispersal area per zone	604	square ft.		Dripline	Wasteflow PC - 1/2gph		
Choose line spacing between WASTEFLOW lines	2	ft.		Dripline longest lateral	45.00	ft.	
Choose emitter spacing between WASTEFLOW emitters	2	ft.		Section 2			
Total linear ft. per zone (minimum required)	302	ft. per zone				Ft of head	Pressure
Total number of emitters per zone	151	emitters per zone		A. Flush line - Losses through return line			
Select Wasteflow dripline (16mm)	Wasteflow PC - 1/2gph	dripline		Select Pipe from dropdown menu	PVC schedule 40		
	Wasteflow Classic			Select Flush Line Diameter	1/2" inch		
	Wasteflow PC - 1/2gph			Length of return line	172	ft.	
	Wasteflow PC - 1 gph			Equivalent length of fittings	5	ft.	
Pressure at the beginning of the dripline	25	psi		Elevation change, (if downhill enter 0)	8	ft.	
Feet of Head at the beginning of the dripline	57.75	ft.		Pressure loss in 100 ft of pipe	64.26	ft.	27.82 psi
What is the flow rate per emitter in gph?	0.53	gph		Total pressure loss from end of dripline to return tank	121.7	ft.	52.70 psi
Dose flow per zone	1.33	gpm		B. Dripline - Losses through Wasteflow dripline			
Note: A few States or Counties require additional flow for flushing. Please check your local regulations. Flush velocity calculation below is for PC dripline. Classic dripline requires less flow to flush than P. Please refer to GeoFlow's spreadsheet "Design Flow and Flush Curves" at www.geoflow.com or call: 800-828-2222				Length of longest dripline lateral	45	ft.	
				Minimum dosing pressure required at end of dripline	121.74	ft.	52.70 psi
				Loss through dripline during flushing	0.12	ft.	0.05 psi
				Total minimum required dripline pressure	121.85	ft.	52.75 psi
If required, choose flush velocity	1	ft/sec		A+B. Minimum Pressure required at beginning of dripline			
How many lines of WASTEFLOW per zone?	12	lines		CALCULATED pressure required at beginning of dripline	243.59	ft.	105.45 psi
Fill in the actual length of longest dripline lateral	45	ft.		SPECIFIED pressure at beginning of dripline (from v	57.8	ft.	25.00 psi
Flush flow required at the end of each dripline	0.74	gpm		!!! Urgent revision required SPECIFIED pressure must be greater than CALCULATED pressure and			
Total Flow required to achieve flushing velocity	8.88	gpm		C. Drip components - Losses through headworks			
Total Flow per zone- worst case scenario	10.21	gpm		Filter	11.6	ft.	5.00 psi
Select Filters and zone valves				Zone valve pressure loss (not in diagram)	-	ft.	- psi
Select Filter Type	BioDisc Filter			Flow meter pressure loss (not in diagram)	-	ft.	- psi
Recommended Filter (item no.)	BioDisc Filter-150	1.5in < 30 gpm		Other pressure losses	-	ft.	- psi
Select Zone Valve Type	Hydraulic			Total loss through drip components	11.55	ft.	5.00 psi
Recommended Zone Valve (item no.)	0			D. Supply line - Minimum Pressure head required to get from pump tank to top of dripline			
Note: minimum pressure of 25 psi required for Hydraulic valves. Check pressure in Cell D8.				Select Pipe from dropdown menu	PVC schedule 40		
Dosing				Select Supply line diameter	1-1/2" inch		
Number of doses per day / zone:	12	doses		Length of supply line	200	ft.	
Timer ON. Pump run time per dose/zone:	32.48	mins:secs		Equivalent length of fittings	5	ft.	
Timer OFF. Pump off time between doses	1.27	hrs:mins		Height from pump to tank outlet	5	ft.	
Per Zone - Pump run time per day/zone:	6.33	hrs:mins		Elevation change, (if downhill enter 0)	-8	ft.	
All Zones - Number of doses per day / all zones	12	doses / day		Pressure loss/gain in 100 ft. of pipe	0.81	ft.	0.35 psi
Allow time for field to pressurize	0:00:30	hrs:mins:secs		Total gain or loss from pump to field	(1.3) ft.		(0.58) psi
Filter flush timer	0:00:20	hrs:mins:secs		Total dynamic head	68.0	ft.	29.42 psi
Drain timer	0:05:00	hrs:mins:secs		Pump capacity * - Field Flush Flow	10.2	gpm	29.42 psi
Field flush timer	0:01:00	hrs:mins:secs		- Field Dose Flow	1.3	gpm	
Field flush counter	3	cycles		- Filter Flush Flow	-	gpm	- psi
Time required to complete all functions per day	7:55	hrs:mins		Pump Model Number			
Dose volume per zone	44	gallons per dose		Voltz / Hz / phase			



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
REGIONAL OFFICES:
SANTA ANA, CALIFORNIA 92705
DUBLIN, CALIFORNIA 94568
SAN JOSE, CALIFORNIA 95128
(510) 887-4086
WWW.LEABRAZE.COM

SOMOGYI RESIDENCE
18000 REDWOOD DRIVE
LOS GATOS, CALIFORNIA
UNINCORPORATED SANTA CLARA COUNTY
APN: 544-37-001

SEPTIC SYSTEM
PLAN CALCULATIONS

-	-
-	-
-	-
-	-
-	-
-	-
REVISIONS	BY

JOB NO: 2201112
DATE: 03-09-21
SCALE: AS NOTED
DESIGN BY: KBC
CHECKED BY: JH
SHEET NO:
OWTS
66-3
03 OF 07 SHEETS

EnviroServer® ES Specifications Book



4" multi-stage submersible pump



This product is Listed to UL Standards for Safety by Underwriters Laboratories Inc. (UL).

The STEP Plus® D Series 4" submersible pump in 10, 20 and 30 GPM models dominate with superior "DRAW-DOWN" capability.

ORDERING INFORMATION		Max Lead		Phase/		Cord		Pallet		Weight	
Catalog Number	HP	Max Lead	Amperage	Volts	Cycles	Length	Quantity	Quantity	Quantity	(Lbs.)	(Lbs.)
1000M5221	1/2	5.5	230	1/60	10'	80	16				
1000M5121	1/2	11.0	115	1/60	10'	80	16				
2000M5221	1/2	4.6	230	1/60	10'	80	16				
2000M5121	1/2	9.5	115	1/60	10'	80	16				
3000M5221	1/2	4.6	230	1/60	10'	80	16				
3000M5121	1/2	9.5	115	1/60	10'	80	16				
2000M5221+1/2	1/2	5.3	230	1/60	10'	80	16				
2000M5121+1/2	1/2	10.6	115	1/60	10'	80	16				

Nylatron® is a registered trademark of Polymer Corp. SignaSeal® and STEP Plus® are trademarks of WICOR Industries. In order to provide the best products possible, specifications are subject to change.

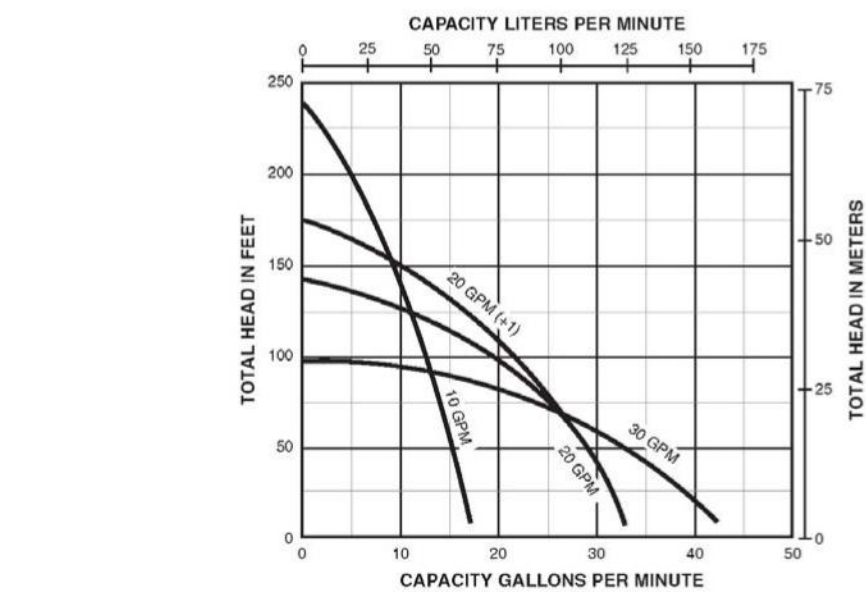
54831051 • Customer Service (242) 728-0161 • 1 • Dubuque, IA 52001 USA • www.pumpco.com

EnviroServer® ES Specifications Book



4" multi-stage submersible pump

PUMP PERFORMANCE



PUMP PERFORMANCE (Capacity in Gallons per Minute)		PSI											
Pump Model	Flow Rate (GPM)	0	10	20	30	40	50	60	70	80	90	100	110
1000M5221	10		15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0		
1000M5121	10		15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0		
2000M5221	20		30.0	26.0	21.5	14.2	4.4						
2000M5121	20		30.0	26.0	21.5	14.2	4.4						
3000M5221	30		38.5	33.3	25.8	16							
3000M5121	30		38.5	33.3	25.8	16							
2000M5221+1/2	20+1		30	27.5	24	20	13.5	6					
2000M5121+1/2	20+1		30	27.5	24	20	13.5	6					

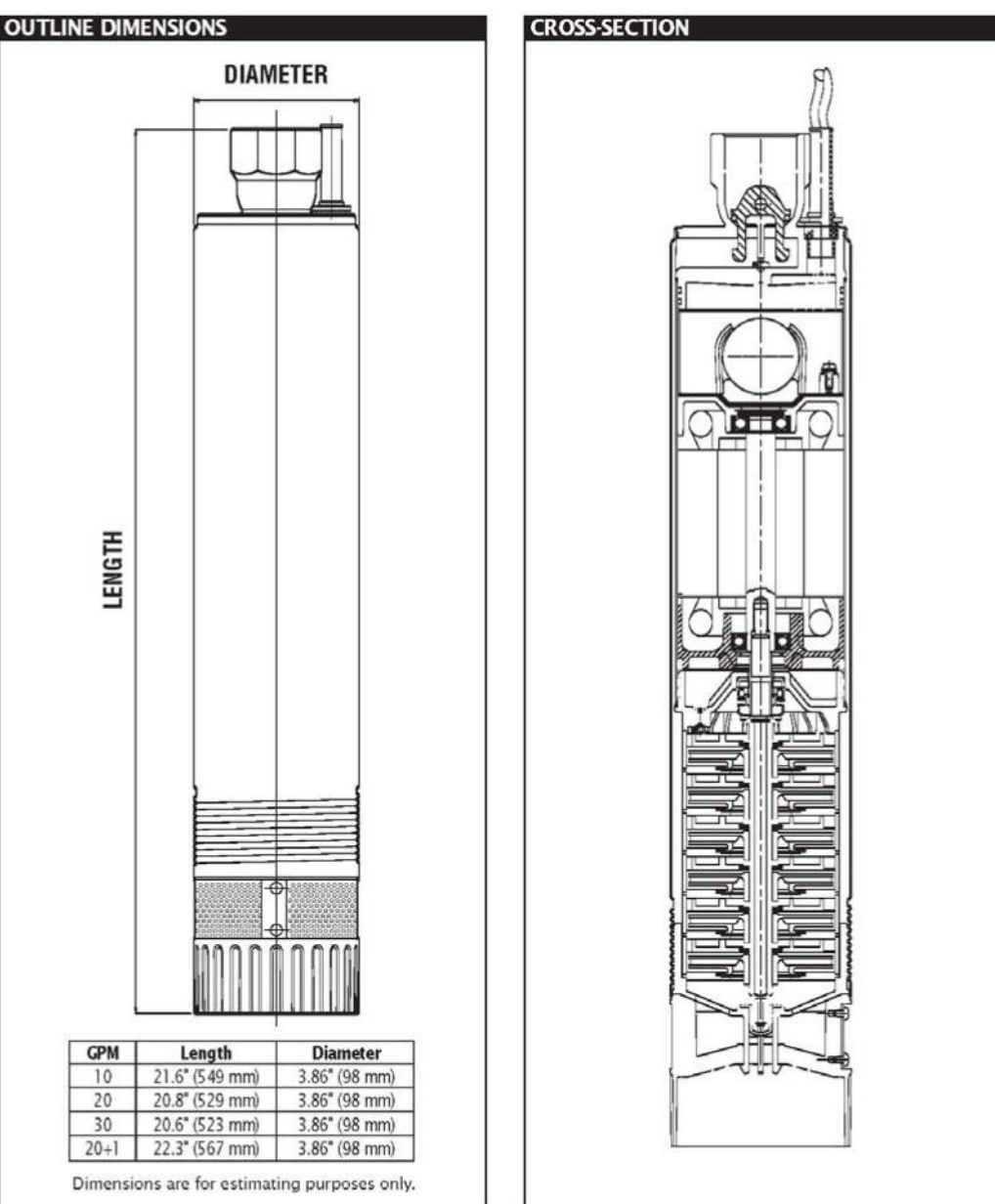
PUMP PERFORMANCE (Capacity in Liters per Minute)		Bar											
Pump Model	Flow Rate (LPM)	0	69	138	207	276	345	413	482	551	620	689	758
1000M5221	37.85		56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8		
1000M5121	37.85		56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8		
2000M5221	75.7		113.6	98.4	81.4	53.7	16.7						
2000M5121	75.7		113.6	98.4	81.4	53.7	16.7						
3000M5221	113.55		146.7	126.0	97.7	60.6							
3000M5121	113.55		146.7	126.0	97.7	60.6							
2000M5221+1/2	75.7+1		113.4	103.9	80.7	75.6	51.0	22.6					
2000M5121+1/2	75.7+1		113.4	103.9	80.7	75.6	51.0	22.6					

54831051 • Customer Service (242) 728-0161 • 2 • Dubuque, IA 52001 USA • www.pumpco.com

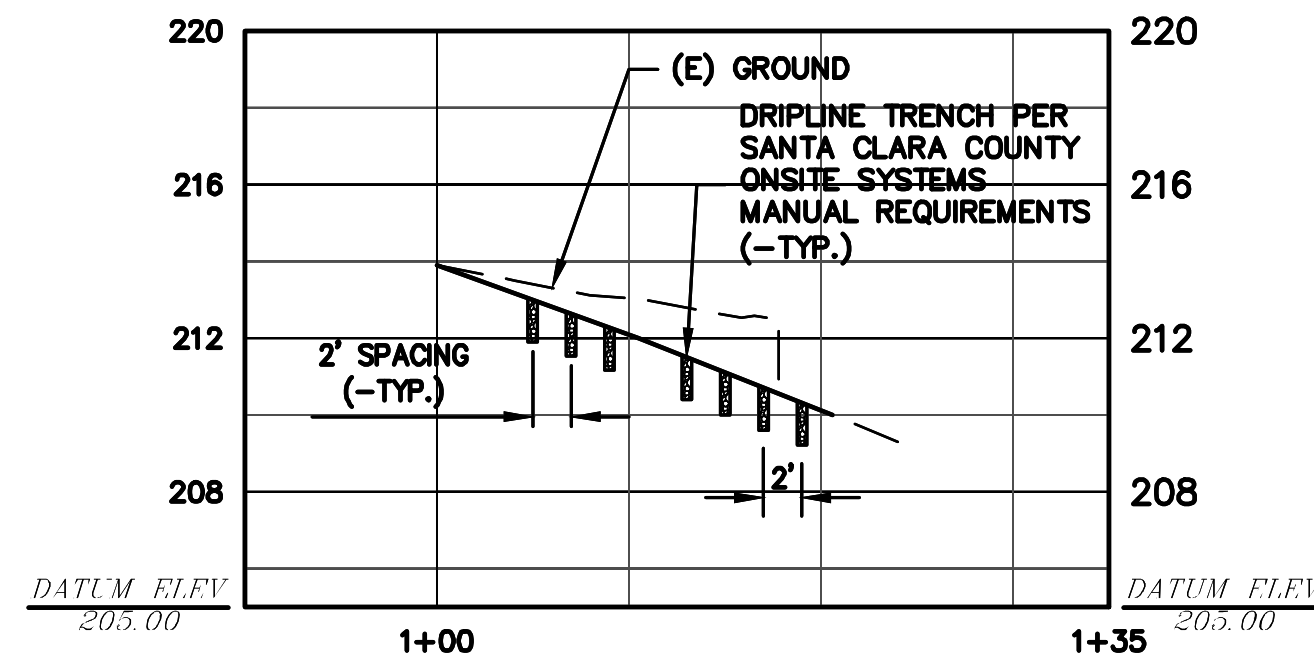
EnviroServer® ES Specifications Book



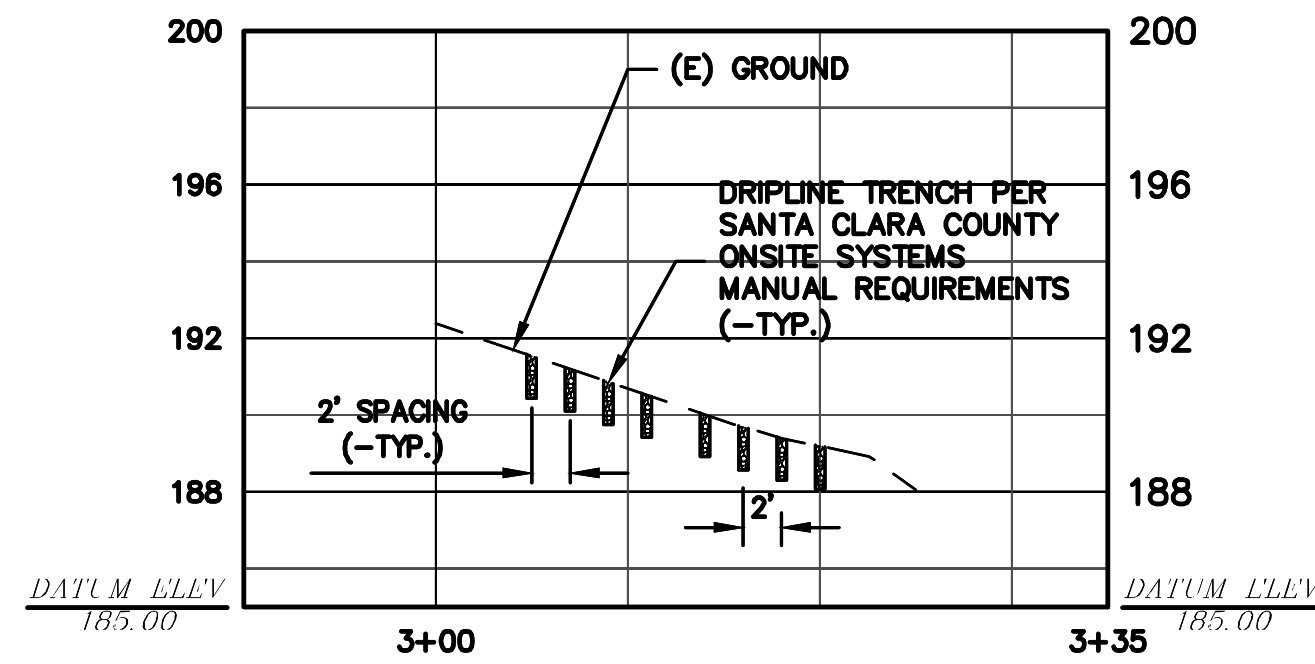
4" multi-stage submersible pump



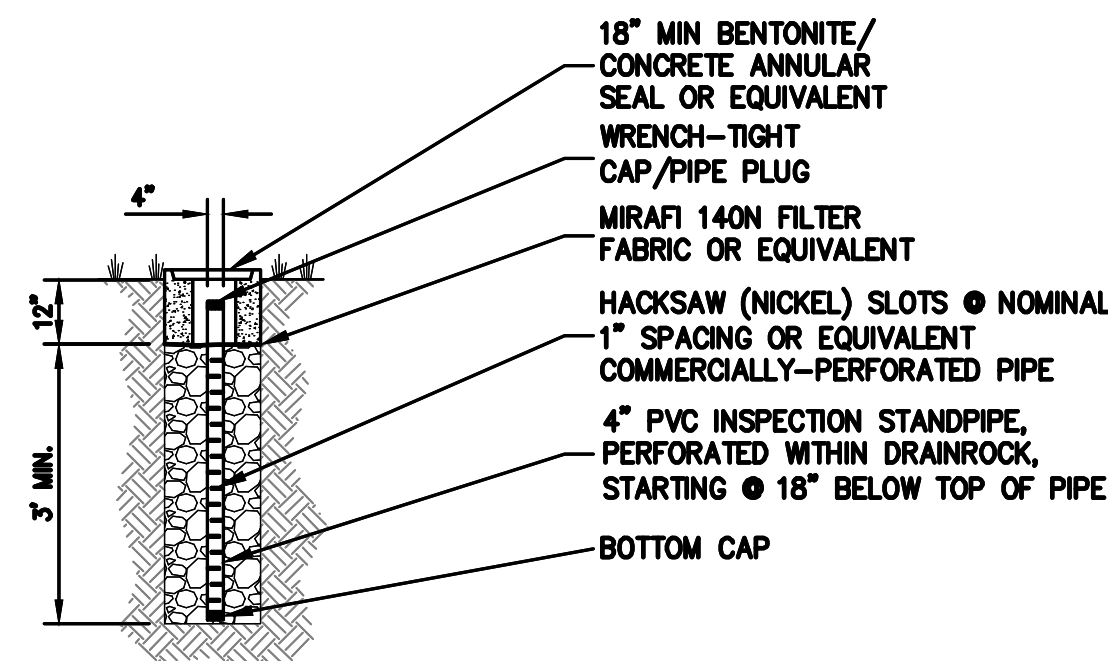
54831051 • Customer Service (242) 728-0161 • 3 • Dubuque, IA 52001 USA • www.pumpco.com



1 TRENCH CROSS SECTION 1
SS-2 SCALE: 1"=10' HORIZ
1"=5' VERT

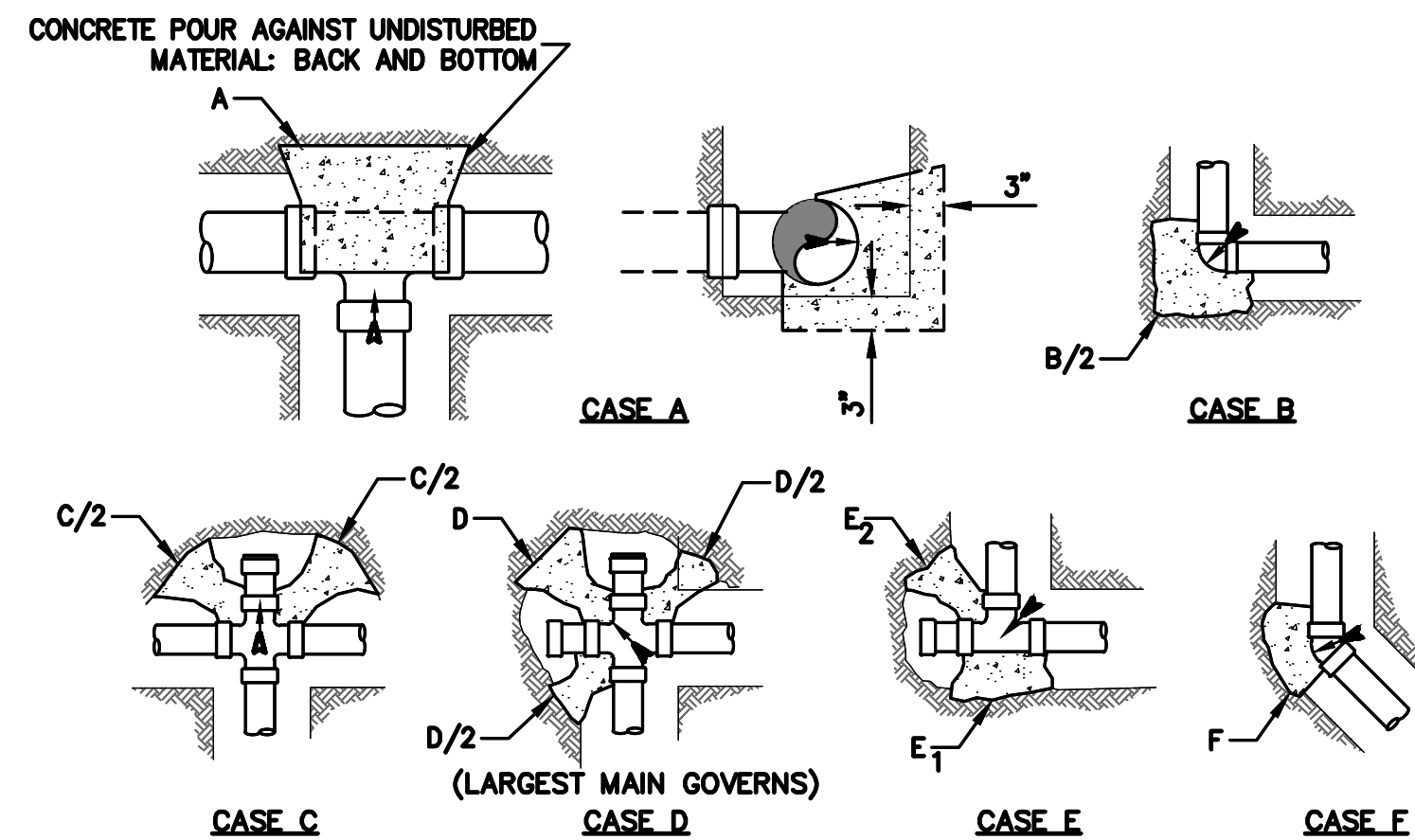


2 TRENCH CROSS SECTION 2
SS-2 SCALE: 1"=10' HORIZ
1"=5' VERT



1 INSPECTION WELL
SS-5 NTS

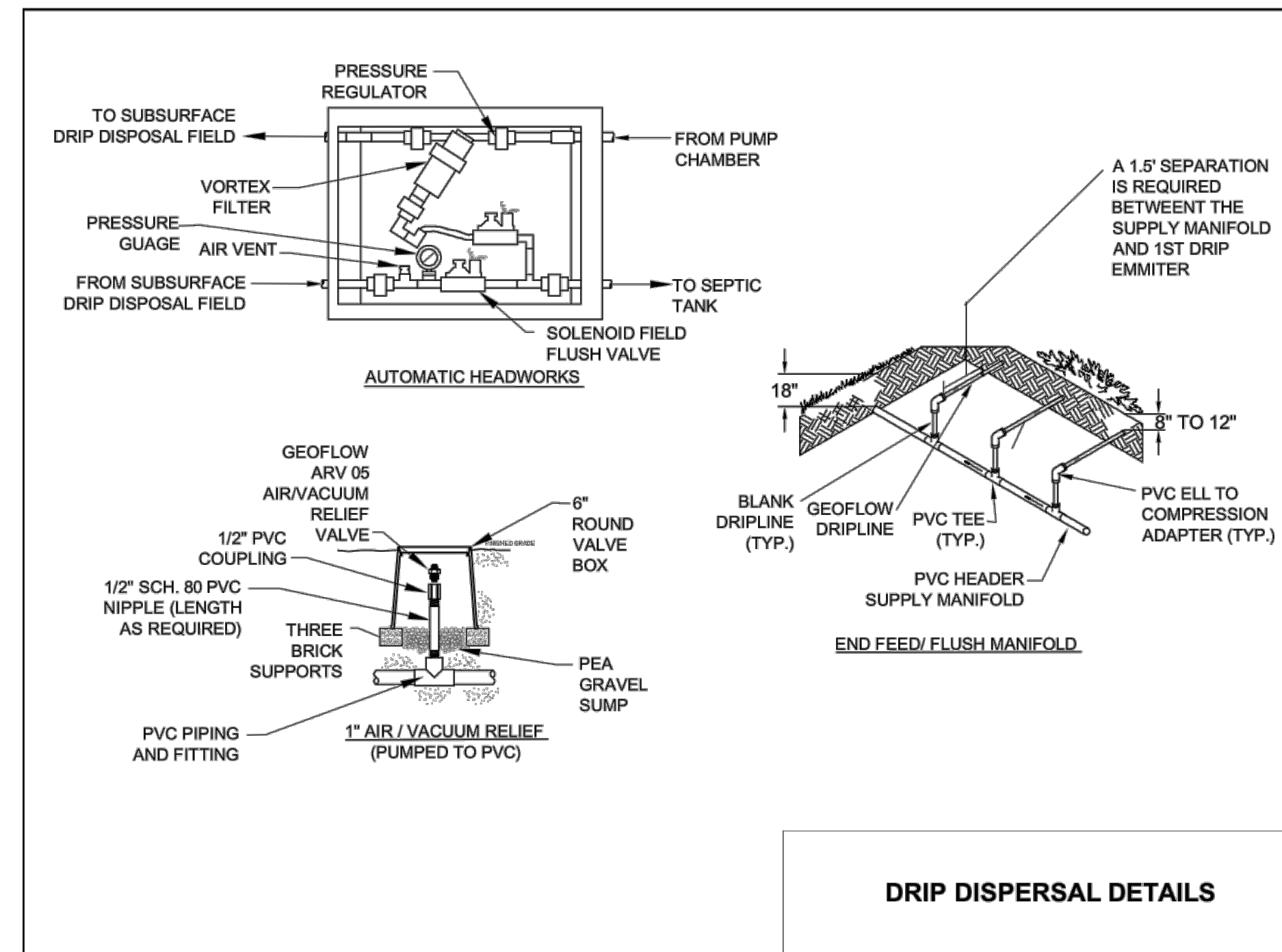
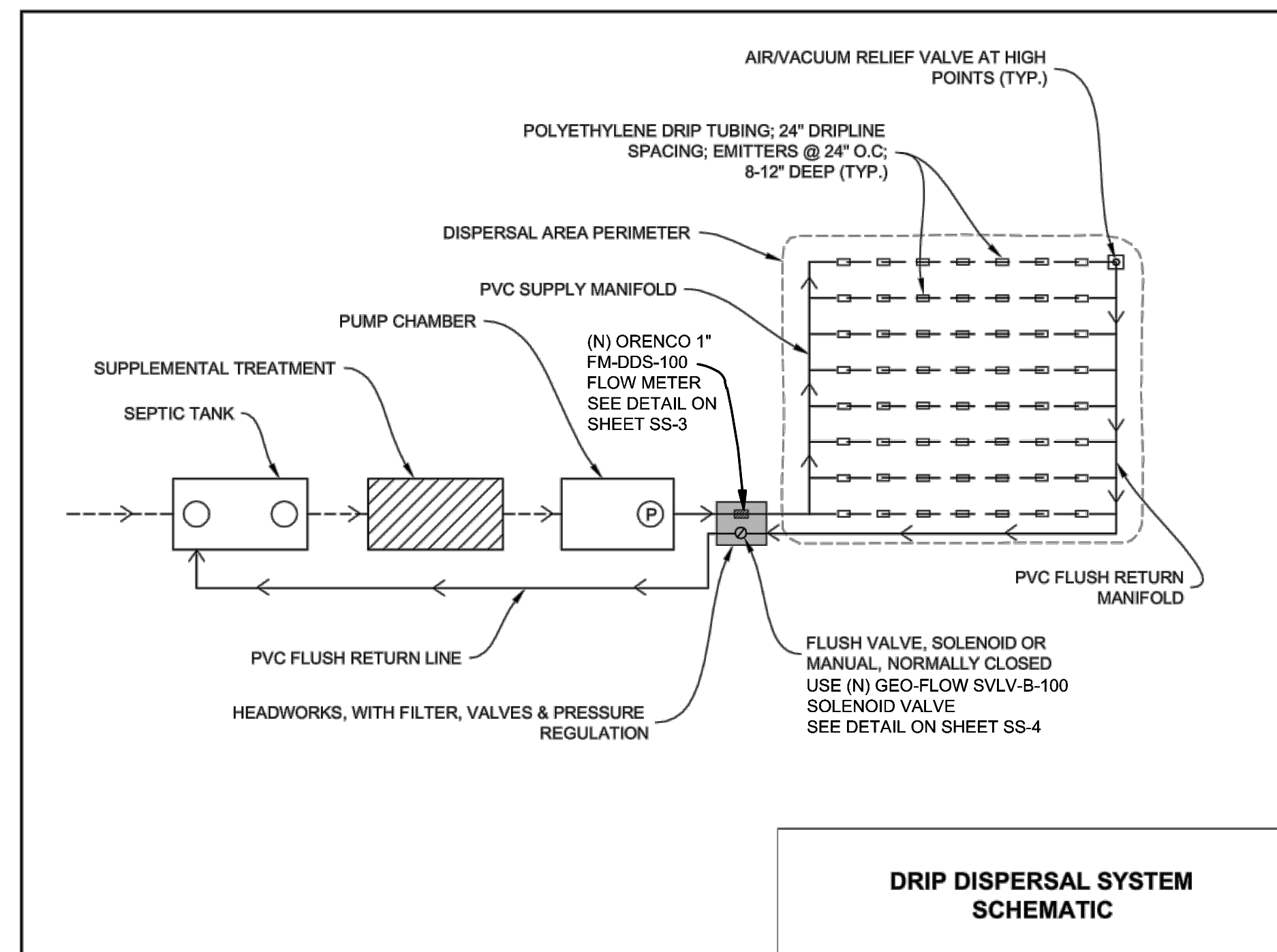
INSPECTION STANDPIPE NOTE:
THREE INSPECTION STANDPIPES SHALL BE INSTALLED WITHIN AND AROUND TRENCH SYSTEMS.
ONE (1) SHALL BE LOCATED UPSLOPE OF THE DISPERSAL FIELD (10-15' AWAY).
ONE (1) SHALL BE LOCATED WITHIN THE DISPERSAL FIELD (TYPICALLY BETWEEN TRENCHES AND NEAR CENTER OF FIELD).
ONE (1) SHALL BE LOCATED DOWN-SLOPE OF THE DISPERSAL FIELD (10-15' AWAY).



- NOTES:
- CASE "A" IS TYPICAL FOR ALL.
 - ALL BLOCKS TO BE KEPT CLEAR OF LUGS.
 - UNSUPPORTED SURFACES TO BE FORMED.
 - ARROWS ON CASE "A", "C" & "E" INDICATE MAINS WHICH DETERMINE BEARING AREA.
 - BASED ON 150 PSI PRESSURE, 1,000 PSF SOIL BEARING.
 - CONCRETE SHALL BE CLASS B PER STANDARD SPECIFICATIONS.

2 THRUST BLOCK DETAIL
SS-5 NTS

REQUIRED BEARING AREAS-SQ.FT.							
	A	B	C	D	E ₁	E ₂	F
≤4"	2	3	3	3	2	3	2
6"	5	6	7	7	5	7	4
8"	8	12	11	11	8	11	6
10"	12	18	17	17	12	17	8
12"	17	24	24	24	17	24	12



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
REGIONAL OFFICES:
MAIN OFFICE: 10000 REDWOOD DRIVE, WEST GATOS, CALIFORNIA 94545
SAN JOSE
(510) 887-4086
WWW.LEABRAZE.COM

SOMOGYI RESIDENCE
18000 REDWOOD DRIVE
LOS GATOS, CALIFORNIA

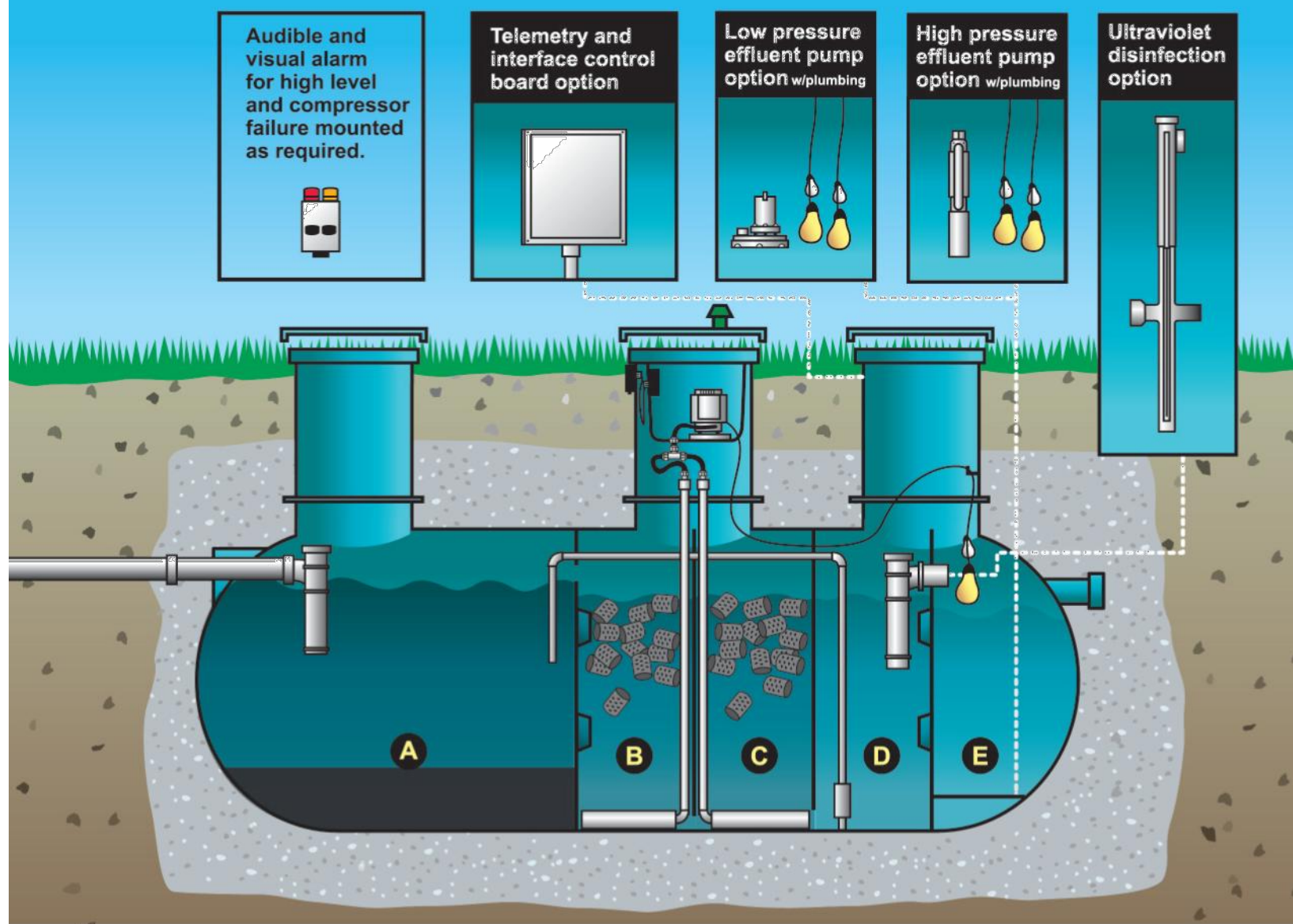
APN: 544-37-001
UNINCORPORATED SANTA CLARA COUNTY

SEPTIC SYSTEM
SECTION & DETAILS

REVISIONS	BY

JOB NO: 2201112
DATE: 03-09-21
SCALE: AS NOTED
DESIGN BY: KBC
CHECKED BY: JH
SHEET NO:
OWTS
SS-5
05 OF 07 SHEETS

EnviroServer - Extended Storage
ES6 and ES12



Hydraulic Volume (gal):

MODEL	A. PRIMARY SETTLING CHAMBER	B. 1st AERATION CHAMBER	C. 2nd AERATION CHAMBER	D. FINAL CLARIFIER	E. EFFLUENT STORAGE	TOTAL GALLONS
ES6	748	250	250	250	210	1708
ES12	1566	502	502	486	380	3436

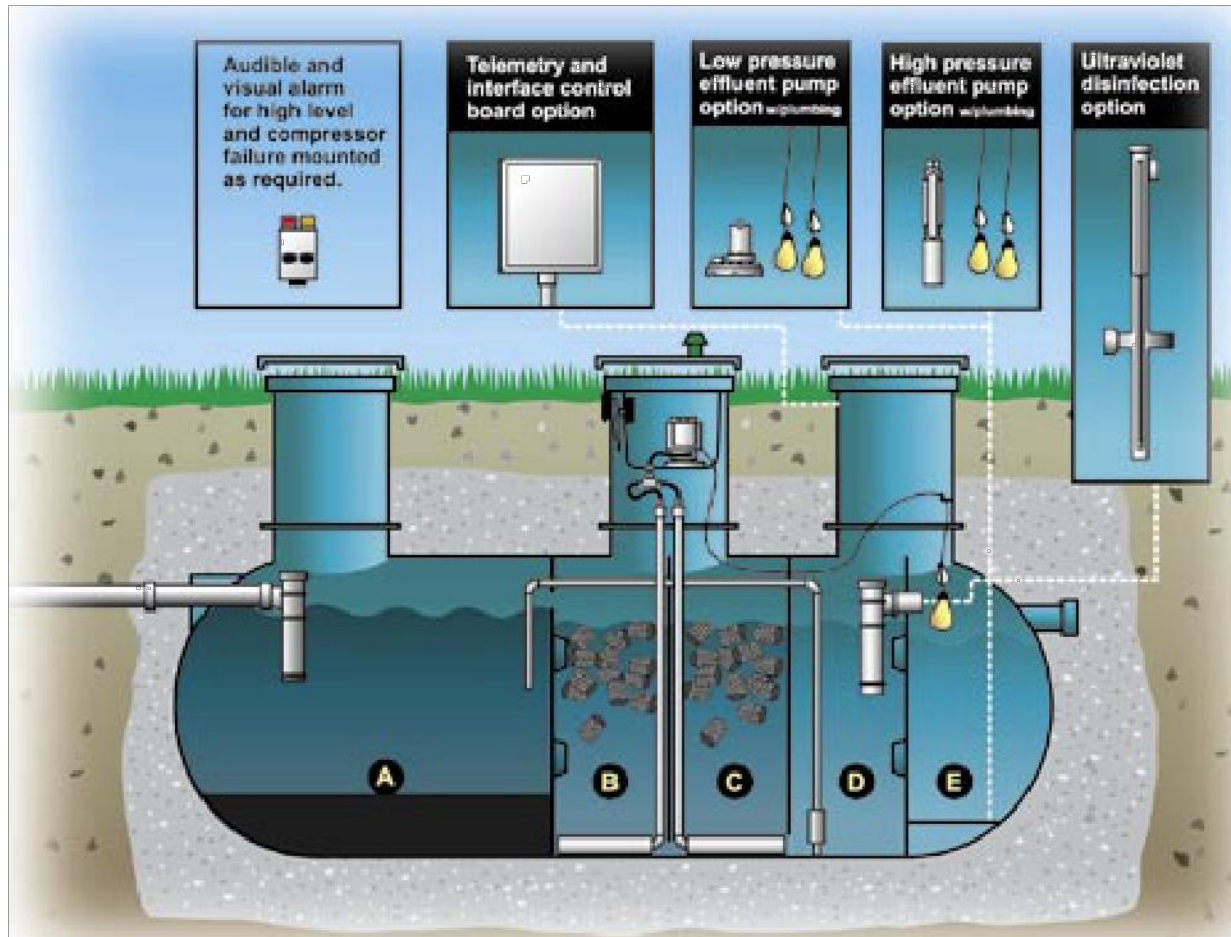
- Extended Storage of sludge in primary compartment. Sludge needs to be pumped every one to three years depending on usage.
- Exactly the same treatment configuration as EnviroServer SM Model, therefore achieving the same clean effluent quality.
- Requires less maintenance due to less moving parts.
- Requires only 115 Volt/1.5 Amp Service.
- 22% Energy savings compared to SM Model.
- Tank delivered with components already assembled, allowing for quick & easy installation.
- Entire system installed below ground.
- Includes audible and visual local alarm for detection of high water level in tank and of compressor failure. Alarm can be mounted indoor or outdoor away from tank.
- System includes effluent filter to protect dispersal field from solids carry-over during upset conditions.
- Disinfection offered as an option; may be required when using shallow dispersal fields.
- Optional effluent pumps for pressurized discharge.
- Optional Telemetry & Controller for effluent pump and additional equipment.

Design and specifications are subject to change without notice.

Daily Power Consumption (kWh):		
EnviroServer	ES6	ES12
Gravity Output	3.2	7.2
Low Pressure Discharge	4.0	7.9
High Pressure Discharge	4.9	9.7
Specifications:		
EnviroServer	ES6	ES12
Treatment Capacity*	600 gpd	1200 gpd
Length	180"	242"
Diameter	60"	72"
Electrical Hookup	115 VAC, 1.5 Amp	

*Based on typical household waste.

EnviroServer ES Process



Raw wastewater from the home enters the system. The first chamber is a primary settling tank where solid waste collects on the bottom. The chamber is sized to hold sludge for one to three years depending on the usage of the system. The first baffle is structurally reinforced to be able to withstand the hydraulic pressure of the first compartment being empty and the second full. As the settling takes place, the water becomes clearer and as more water enters the system, it overflows into chamber B.

The primary clarified wastewater overflows into the chamber B and underflows into chamber C. At the base of the chambers B and C are air diffusers that create fine air bubbles, which allow for the aerobic digestion of waste. Unlike most on/off cycling air compressors, our system features continuous-flow compressors for maximum digestion. The EnviroServer ES utilizes a combination of an attached and suspended growth process. The attached film is growing on a biomedium and the suspended growth is created by mixing and recirculating sludge. This combination results in a treatment efficiency that exceeds the individual performance of an attached or suspended growth process.

Chamber C is a continuation of the aerobic process started in chamber B. Wastewater underflows from chamber C to chamber D. Chamber D is the clarifier where final settling of suspended solids and clarification of the effluent is taking place. It is designed for optimum performance without any chemical addition. To promote denitrification and remove accumulated biomass, the settled solids are recirculated back to the first chamber by a recirculation pump. The recirculation pump is operated by an air-lift action and does not have any moving parts. The EnviroServer ES provides increased residence time in the chamber A for improved denitrification, which may be important in colder climates. The clarified water leaves the treatment system through an effluent filter into chamber E which is the Effluent Storage compartment. The effluent filter protects the effluent storage and the dispersal field from solids carry-over during upset conditions. It is designed to remove all particles larger than 1/16".

The water flowing into chamber E is now very clear and clean. If desired, or required, ultra-violet can be introduced for disinfection of the water prior to surface or sub-surface discharge.

EnviroServer ES Model

COUNTY OF SANTA CLARA

CONSTRUCTION INSPECTION. THE FOLLOWING MINIMUM INSPECTIONS PRIOR TO COMMENCING CONSTRUCTION OR COVERING ANY ELEMENTS OF THE SYSTEM SHALL BE REQUIRED. JOINT INSPECTION BY THE DESIGNER, INSTALLER, AND SANTA CLARA COUNTY DEH MAY BE REQUIRED.

- PRE-CONSTRUCTION INSPECTION WHERE THE CONSTRUCTION STAKING OR MARKING OF THE TREATMENT UNIT IS TO BE PLACED AND INSTALLATION PROCEDURES ARE DISCUSSED;
- TESTING OF THE TREATMENT UNIT:
 - FUNCTION AND SETTING OF ALL CONTROL DEVICES AND ALARMS.
 - WATER-TIGHTNESS OF SEPTIC TANK, TREATMENT TANK(S), AND DOSING TANK, AS APPLICABLE.
- CONSTRUCTION INSPECTION
ONSITE SYSTEMS MANUAL - PART 4 (5/2014) PAGE 64.
 - PRE-CONSTRUCTION INSPECTION WHERE THE CONSTRUCTION STAKING OR MARKING OF THE DRIP LINES, SUPPLY AND RETURN PIPING, PUMP SYSTEM AND APPURTENANCES IS PROVIDED AND CONSTRUCTION PROCEDURES DISCUSSED;
 - WATER TIGHTNESS OF EFFLUENT DOSING (PUMP) TANK;
 - DRIP FIELD LAYOUT, PIPING MATERIALS AND INSTALLATION, AND ALL ASSOCIATED VALVES AND CONNECTIONS;
 - HYDRAULIC TESTING OF THE DRIP SYSTEM;
 - FUNCTIONING AND SETTING OF ALL CONTROL DEVICES; AND
 - FINAL INSPECTION TO VERIFY THAT ALL CONSTRUCTION ELEMENTS ARE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND MANUFACTURE RECOMMENDATIONS; ALL INSPECTION WELLS ARE INSTALLED; AND EROSION CONTROL HAS BEEN COMPLETED. OWNER AND SERVICE PROVIDER SHALL BE PROVIDED.
- MANAGEMENT REQUIREMENTS
RECOMMENDED MINIMUM PROCEDURES AND FREQUENCY FOR INSPECTION, MAINTENANCE, MONITORING AND REPORTING ACTIVITIES FOR PROPRIETARY TREATMENT SYSTEMS ARE OUTLINED IN TABLE DD-1 BELOW.

Table DD-2. Drip Dispersal System Management Requirements

	Work	Frequency
Inspection	<ul style="list-style-type: none">Conduct routine visual observations of drip field, downslope area and surroundings for wet areas, pipe leaks or damage, soil erosion, drainage issues, abnormal vegetation, gophers or other problems.Conduct routine physical inspections of system components, including valves, filters, and headworks box(es).Perform special inspections of drip field at time of any landscaping work or other digging in drip field area.Perform inspections of dosing pump(s) and appurtenances (per O&M manual and Performance Evaluation Guidelines, Part 5 of this Manual).Record observations.	<ul style="list-style-type: none">Every 6 to 12 months.
Maintenance	<ul style="list-style-type: none">Manually remove and clean filter.Clean and check operation of pressure reducing valves.Clean flush valves and vacuum release valves.	<ul style="list-style-type: none">Clean filter every 6 months.Other maintenance annually.
Water Monitoring & Sampling	<ul style="list-style-type: none">Measure and record water levels in dispersal field monitoring wells, as applicable, per permit requirements.Obtain and analyze water samples from dispersal field monitoring wells, as applicable, per permit requirements.	<ul style="list-style-type: none">According to permit conditions, if applicable.
Reporting	<ul style="list-style-type: none">Report findings to DEH per permit requirements.Standard report to include dates, monitoring well and other data collected, work performed, corrective actions taken, and performance summary.Report public health/water quality emergency to DEH immediately.	<ul style="list-style-type: none">According to permit conditions, typically every 1 to 2 years, depending on system size, usage, history, location.

PUMP STORAGE VOLUME CALCULATION

DOSING VOLUME = 33 GALLONS (FROM LEACHFIELD CALCULATIONS ON SHEET SS-3)

TANK CAPACITY = 1500 GALLONS

HEIGHT OF TANK TO INVERT OF INLET PIPE = 56.75 INCHES

DETERMINE RESERVE STORAGE HEIGHT

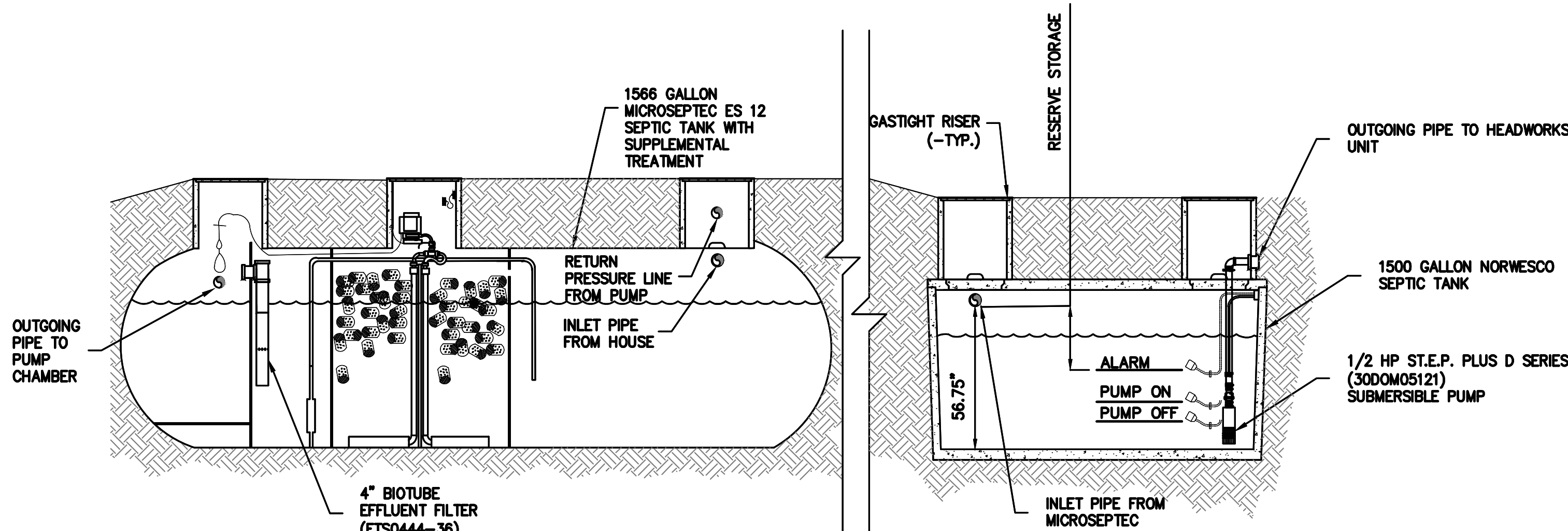
REQUIRED STORAGE VOLUME = 1012.50 GALLONS (1.5 X 675 GALLONS FOR 6 BEDROOM HOUSE)

$$\frac{\text{VOLUME}}{\text{TANK HEIGHT}} = \frac{1500 \text{ GALLONS}}{56.75 \text{ INCHES}} = 26.43 \text{ GALLONS/INCHES}$$

REQUIRED HEIGHT FOR RESERVE STORAGE = 39 INCHES

HEIGHT = 56.75 INCHES + 39 INCHES = 95.75 INCHES

PLACE ALARM FLOAT 17.75 INCHES FROM BOTTOM TO ENSURE MINIMUM 1.5 DAY RESERVE STORAGE



- NOTES:
- PROVIDE RESERVE STORAGE CAPACITY FOR 1.5 DAYS
 - PLACE ALARM FLOAT 17.75" FROM BOTTOM OF TANK
 - PLACE PUMP ON FLOAT 12" FROM BOTTOM OF TANK
 - PLACE PUMP OFF FLOAT 9" FROM BOTTOM OF TANK

RESIDENTIAL SEPTIC TANK
& PUMP CHAMBER

NTS



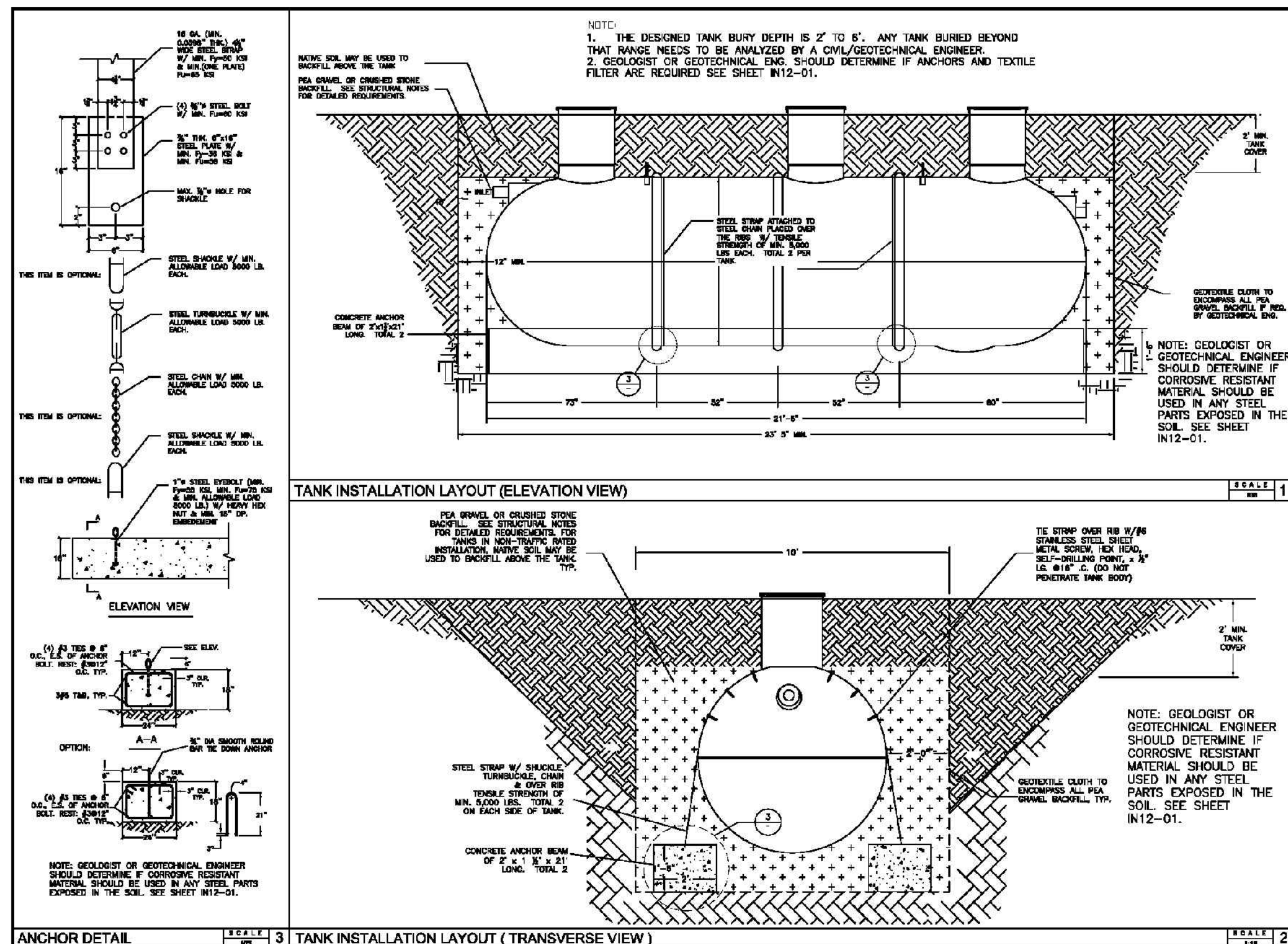
AXQ
ENGINEERING INC.
1500 BROOKHOLLOW, SUITE 40
SANTA ANA, CA 92705
OFF: (714) 882-0818
FAX: (714) 882-0808
WWW.AXQENGINEERING.COM

REVISION	DATE	DESCRIPTION

ES 12
SEPTIC TANK DESIGN

INSTALLATION DRAWING
NON TRAFFIC W/ ANCHORS

IN12-04



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
REGIONAL OFFICES:
SANTA ANA, CA 92705
DUBLIN, CA 94568
SAN JOSE, CA 95128
(510) 887-4086
WWW.LEABRAZE.COM

SOMOGYI RESIDENCE
18000 REDWOOD DRIVE
LOS GATOS, CALIFORNIA

APN: 544-37-001

UNINCORPORATED SANTA CLARA COUNTY

SEPTIC SYSTEM
SECTION & DETAILS

REVISIONS BY

JOB NO: 2201112

DATE: 03-09-21

SCALE: AS NOTED

DESIGN BY: KBC

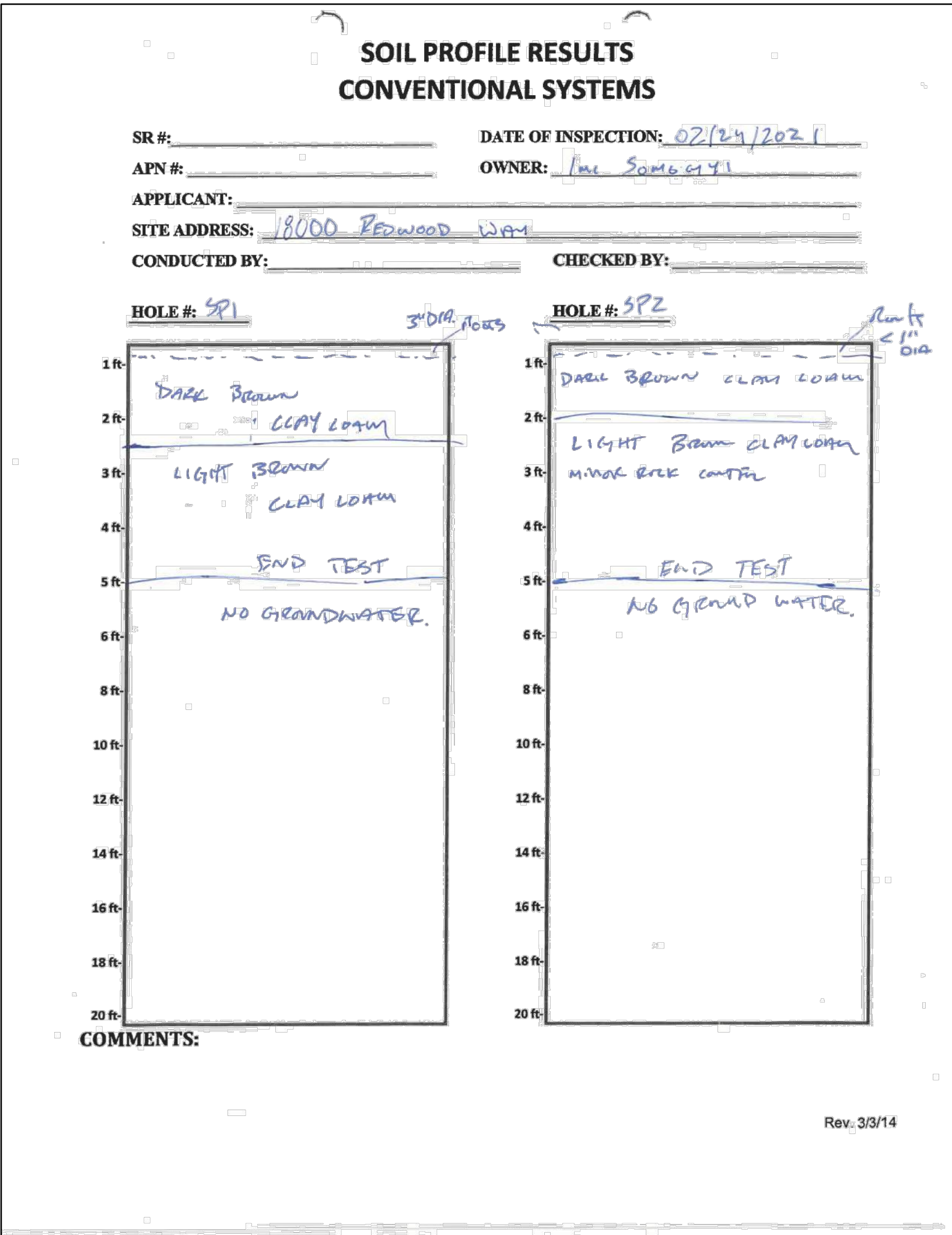
CHECKED BY: JH

SHEET NO:

OWTS

SS-6

06 OF 07 SHEETS



County of Santa Clara - Department of Environmental Health															
SOIL PERCOLATION TEST RECORDED MEASUREMENTS															
OWNER/APPLICANT: Imi Somogyi								SR#:		PLN FILE #					
LOCATION: 18000 Redwood Drive								REHS/RCE: Lea & Braze Engineering							
CONTACT PERSON: John Halbom								PHONE: (408) 965-8478		TEST DATE: 03/05/2021					

HOLE #1							HOLE #2								
TIME		DEPTH = 1.5'		WATER LEVEL			TIME		DEPTH = 2.0'		WATER LEVEL				
START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI	START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI		
8:20	8:50	24	DRY	30	-	-	8:23	8:53	25 1/8	21 2/8	30	3 7/8	7.74		
8:50	9:20	23 7/8	DRY	30	-	-	8:53	9:23	25 1/8	21 4/8	30	3 5/8	8.28		
9:40	9:50	23 7/8	19 7/8	10	4	2.50	9:23	9:53	25 1/8	21 3/8	30	3 6/8	8.00		
9:50	10:00	23 7/8	20 2/8	10	3 5/8	2.76	9:53	10:23	25 1/8	21 5/8	30	3 4/8	8.57		
10:00	10:10	23 7/8	20 4/8	10	3 3/8	2.96	6.6% DIFFERENCE STABLE								
10:10	10:20	23 7/8	20 4/8	10	3 3/8	2.96									
10:20	10:30	23 7/8	20 3/8	10	3 4/8	2.86									
						STABLE									
						Stabilized MPI	2.93							Stabilized MPI	8.28

HOLE #3							HOLE #4								
TIME		DEPTH = 1.5'		WATER LEVEL			TIME		DEPTH = 2.0'		WATER LEVEL				
START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI	START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI		
8:26	8:56	55 4/8	DRY	30	-	-	8:29	8:59	25 4/8	23 3/8	30	2 1/8	14.12		
8:56	9:26	55 4/8	DRY	30	-	-	8:59	9:29	25 4/8	23 4/8	30	2	15.00		
SWITCH TO 10 MIN INTERVAL							9:29	9:59	25 4/8	23 5/8	30	1 7/8	16.00		
9:42	9:52	55 4/8	DRY	10	-	-	9:59	10:29	25 4/8	23 6/8	30	1 6/8	17.14		
9:52	10:02	55 4/8	DRY	10	-	-	STABLE								
SWITCH TO 5 MIN INTERVAL															
11:08	11:12	55 4/8	51 4/8	4	4	1.00									
11:12	11:16	55 4/8	51 3/8	4	4 1/8	0.97									
11:16	11:20	55 4/8	51 4/8	4	4	1.00									
						STABLE									
						Stabilized MPI	0.99							Stabilized MPI	16.05

HOLE #5							HOLE #6								
TIME		DEPTH = 2.0'		WATER LEVEL			TIME		DEPTH = 6.5'		WATER LEVEL				
START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI	START	FINISH	START	FINISH	ΔMIN	ΔINCH	MPI		
8:32	9:02	26 1/8	DRY	30	-	-	COULD NOT HIT								
9:02	9:32	26 3/8	DRY	30	-	-									
9:32	10:02	26 7/8	DRY	30	-	-									
						SWITCH TO 10 MIN INTERVAL									
10:38	10:48	26 2/8	DRY	30	-	-									
						SWITCH TO 15 MIN INTERVAL									
10:45	10:50	26 2/8	21 5/8	5	4 5/8	1.08									
10:50	10:55	26 2/8	21 4/8	5	4 6/8	1.05									
10:56	11:01	26 2/8	21 5/8	5	4 5/8	1.08									
						Stabilized MPI	1.07							Stabilized MPI	#DIV/0!

HOLE	1	2	3	4	5	6
Stabilized MPI	R	2.93	8.28	0.99	16.05	1.07
Adjusted Stabilized MPI	$R_{12}=R \times 1.4$	4.10	11.60	1.39	22.47	1.50
Average Adjusted Stabilized MPI	$R_{22}=(\sum R_{12})/\#Holes$	8.209386013				
# Bedrooms	FOR OFFICE USE ONLY	TANK SIZE (Gall):		LEACH LINE (feet)		

OWTS OPERATING PERMIT NOTES

PER SANTA CLARA COUNTY ONSITE WASTEWATER TREATMENT SYSTEMS (OWTS) ORDINANCE, GENERAL REQUIREMENTS PERTAINING TO OPERATING PERMITS ARE AS FOLLOWS:

- THE OPERATING PERMIT WILL BE ISSUED BY THE COUNTY DIRECTOR FOLLOWING:
(A) COMPLETION OF CONSTRUCTION OF THE ALTERNATIVE OWTS;
(B) SATISFACTORY COMPLIANCE WITH THE INSTALLATION PERMIT REQUIREMENTS; AND
(C) PAYMENT OF APPLICABLE FEES. OPERATING PERMITS ARE NON-TRANSFERABLE.
- AFTER INITIAL ISSUANCE, THE OPERATING PERMIT IS REQUIRED TO BE RENEWED PERIODICALLY, THE STANDARD RENEWAL PERIOD BEING ONE YEAR. THE DIRECTOR MAY ESTABLISH CONDITIONS ALLOWING THE TIME PERIOD BETWEEN RENEWALS TO BE EXTENDED FOR CERTAIN TYPES OF OWTS BASED ON A RECORD OF FAVORABLE PERFORMANCE OR OTHER FACTORS WARRANTING A REDUCTION IN SYSTEM OVERSIGHT BY COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH). PROVISIONS FOR ADJUSTING THE OPERATING PERMIT RENEWAL PERIOD SHALL BE PRESCRIBED BY THE DIRECTOR IN THE ONSITE SYSTEMS MANUAL. OPERATING PERMITS MUST ALSO BE RENEWED AT THE TIME OF CHANGE IN PROPERTY OWNERSHIP.
- OPERATING PERMITS ARE INTENDED TO SERVE AS THE BASIS FOR VERIFYING THE ADEQUACY OF ALTERNATIVE OWTS PERFORMANCE AND ENSURING ON-GOING MAINTENANCE. PERMIT CONDITIONS SHALL INCLUDE MONITORING AND INSPECTION REQUIREMENTS, PERMIT DURATION, AND OTHER PROVISIONS AS PRESCRIBED BY THE DIRECTOR IN THE ONSITE SYSTEMS MANUAL OR AS DEEMED APPROPRIATE BY THE DIRECTOR ON A CASE-BY-CASE BASIS.
- RENEWAL OF AN OPERATING PERMIT REQUIRES:
(A) PAYMENT OF THE APPLICABLE FEES, UPON RECEIPT OF NOTICE FROM THE DIRECTOR; AND
(B) SUBMISSION OF THE RESULTS OF REQUIRED SYSTEM INSPECTION AND MONITORING.
- FAILURE TO PAY THE REQUIRED FEE OR SUBMIT THE SPECIFIED MONITORING AND INSPECTION INFORMATION, OR FAILURE TO UNDERTAKE ANY REQUIRED CORRECTIVE WORK SPECIFIED BY THE DIRECTOR MAY BE CAUSE FOR ISSUANCE OF A CITATION, PENALTY FEES, NON-RENEWAL AND/OR REVOCATION OF THE OPERATING PERMIT BY THE DIRECTOR. THE DIRECTOR MAY PLACE A LIEN ON THE PROPERTY FOR RECOVERY OF ANY ASSOCIATED ABATEMENT COSTS AND UNPAID FEES.
- A CERTIFIED COPY OF THE FOLLOWING SHALL BE RECORDED AGAINST THE PROPERTY IN THE OFFICE OF THE COUNTY RECORDER OF SANTA CLARA COUNTY:
(A) INITIAL OPERATING PERMIT ISSUED FOR THE SYSTEM;
(B) REISSUANCE OF OPERATING PERMIT TO NEW OWNERS; AND
(C) NOTICES OF WITHDRAWAL OF ANY OPERATING PERMIT.

OWTS PERFORMANCE MONITORING AND REPORTING NOTES

- A MONITORING PROGRAM WILL BE ESTABLISHED FOR EACH ALTERNATIVE OWTS AS A CONDITION OF THE OPERATING PERMIT AT THE TIME OF PERMIT ISSUANCE, AND MAY BE AMENDED AT THE TIME OF PERMIT RENEWAL. SAID MONITORING SHALL BE PERFORMED TO ENSURE THAT THE ALTERNATIVE OWTS IS FUNCTIONING SATISFACTORILY TO PROTECT WATER QUALITY AND PUBLIC HEALTH AND SAFETY. THE MONITORING PROGRAM WILL BE IN ACCORDANCE WITH GUIDELINES IN THE ONSITE SYSTEMS MANUAL AND MAY ALSO INCORPORATE RECOMMENDATIONS OF THE SYSTEM DESIGNER, MANUFACTURER, OR THIRD-PARTY REVIEWER.
- THE REQUIRED FREQUENCY OF MONITORING WILL BE IN ACCORDANCE WITH GUIDELINES IN THE ONSITE SYSTEMS MANUAL. MONITORING FREQUENCY MAY BE INCREASED IF, IN THE OPINION OF THE DIRECTOR, SYSTEM PROBLEMS ARE EXPERIENCED.
- MONITORING OF ALTERNATIVE OWTS SHALL BE CONDUCTED BY OR UNDER THE SUPERVISION OF ONE OF THE FOLLOWING:
(1) REGISTERED CIVIL ENGINEER;
(2) PROFESSIONAL GEOLOGIST;
(3) REGISTERED ENVIRONMENTAL HEALTH SPECIALIST; OR
(4) OTHER ONSITE WASTEWATER MAINTENANCE PROVIDER REGISTERED WITH THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND MEETING QUALIFICATIONS AS ESTABLISHED IN THE ONSITE SYSTEMS MANUAL. REGISTRATION SHALL ENTAIL:
(A) DOCUMENTATION OF REQUIRED QUALIFICATIONS;
(B) PARTICIPATION IN ANNUAL TRAINING/REVIEW CONDUCTED BY THE DIRECTOR; AND
(C) PAYMENT OF AN ANNUAL FEE ESTABLISHED BY THE BOARD OF SUPERVISORS.
ADDITIONALLY, THE DIRECTOR MAY REQUIRE THIRD-PARTY OR COUNTY MONITORING OF ANY ALTERNATIVE OWTS WHERE DEEMED NECESSARY BECAUSE OF SPECIAL CIRCUMSTANCES, SUCH AS THE COMPLEXITY OF THE SYSTEM OR THE SENSITIVE NATURE OF THE SITE. THE COSTS FOR SUCH ADDITIONAL MONITORING WOULD BE THE RESPONSIBILITY OF THE OWNER.
- MONITORING RESULTS SHALL BE SUBMITTED TO THE DIRECTOR IN ACCORDANCE WITH REPORTING GUIDELINES PROVIDED IN THE ONSITE SYSTEMS MANUAL. THE MONITORING REPORT SHALL BE SIGNED BY THE PARTY RESPONSIBLE FOR THE MONITORING. NOTWITHSTANDING FORMAL MONITORING REPORTS, THE DIRECTOR SHALL BE NOTIFIED IMMEDIATELY OF ANY SYSTEM PROBLEMS OBSERVED DURING SYSTEM INSPECTION AND MONITORING THAT THREATEN PUBLIC HEALTH OR WATER QUALITY.
- IN ADDITION TO REGULAR INSPECTION AND MONITORING ACTIVITIES, POST-SEISMIC INSPECTION AND EVALUATION OF ALTERNATIVE OWTS LOCATED IN HIGH-RISK SEISMIC AREAS WILL BE REQUIRED IN THE EVENT OF AN EARTHQUAKE CAUSING SIGNIFICANT GROUND SHAKING IN THE REGION, AS DETERMINED BY THE DIRECTOR IN CONSULTATION WITH THE COUNTY GEOLOGIST. THE DIRECTOR WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICES WHEN SUCH INSPECTIONS ARE REQUIRED; THOSE CONDUCTING THE INSPECTIONS WILL BE REQUIRED TO REPORT THE INSPECTION RESULTS TO THE DIRECTOR. THE PURPOSE OF SUCH INSPECTIONS WILL BE TO ASSESS AND DOCUMENT ANY DAMAGE TO THE OWTS AND TO IMPLEMENT CORRECTIVE MEASURES, AS NEEDED, IN A TIMELY MANNER. POST-SEISMIC INSPECTION SHALL BE IN ACCORDANCE WITH REQUIREMENTS PRESCRIBED BY THE DIRECTOR, IN CONSULTATION WITH THE COUNTY GEOLOGIST, AND CONTAINED IN THE ONSITE SYSTEMS MANUAL.
- THE DIRECTOR WILL, FROM TIME-TO-TIME, COMPILER AND REVIEW MONITORING AND INSPECTION RESULTS FOR ALTERNATIVE OWTS AND, AT LEAST EVERY TWO YEARS, WILL PROVIDE A SUMMARY OF RESULTS TO THE SAN FRANCISCO BAY AND CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARDS. BASED ON THIS REVIEW, THE DIRECTOR MAY REQUIRE CORRECTIVE ACTION FOR SPECIFIC PROPERTIES OR CERTAIN TYPES OF ALTERNATIVE OWTS, OR GENERAL CHANGES IN MONITORING AND INSPECTION REQUIREMENTS.



LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
REGIONAL OFFICES:
DUBLIN, CA
HAYWARD, CA
SAN JOSE, CA
(510) 887-4086
WWW.LEABRAZE.COM

SOMOGYI RESIDENCE
18000 REDWOOD DRIVE
LOS GATOS, CALIFORNIA
UNINCORPORATED SANTA CLARA COUNTY
APN: 544-37-001

SEPTIC SYSTEM
SECTION & DETAILS

-	-
-	-
-	-
-	-
-	-
REVISIONS	BY

JOB NO: 2201112
DATE: 03-09-21
SCALE: AS NOTED
DESIGN BY: KBC

CHECKED BY: JH
SHEET NO:

OWTS
SS-7
07 OF 07 SHEETS