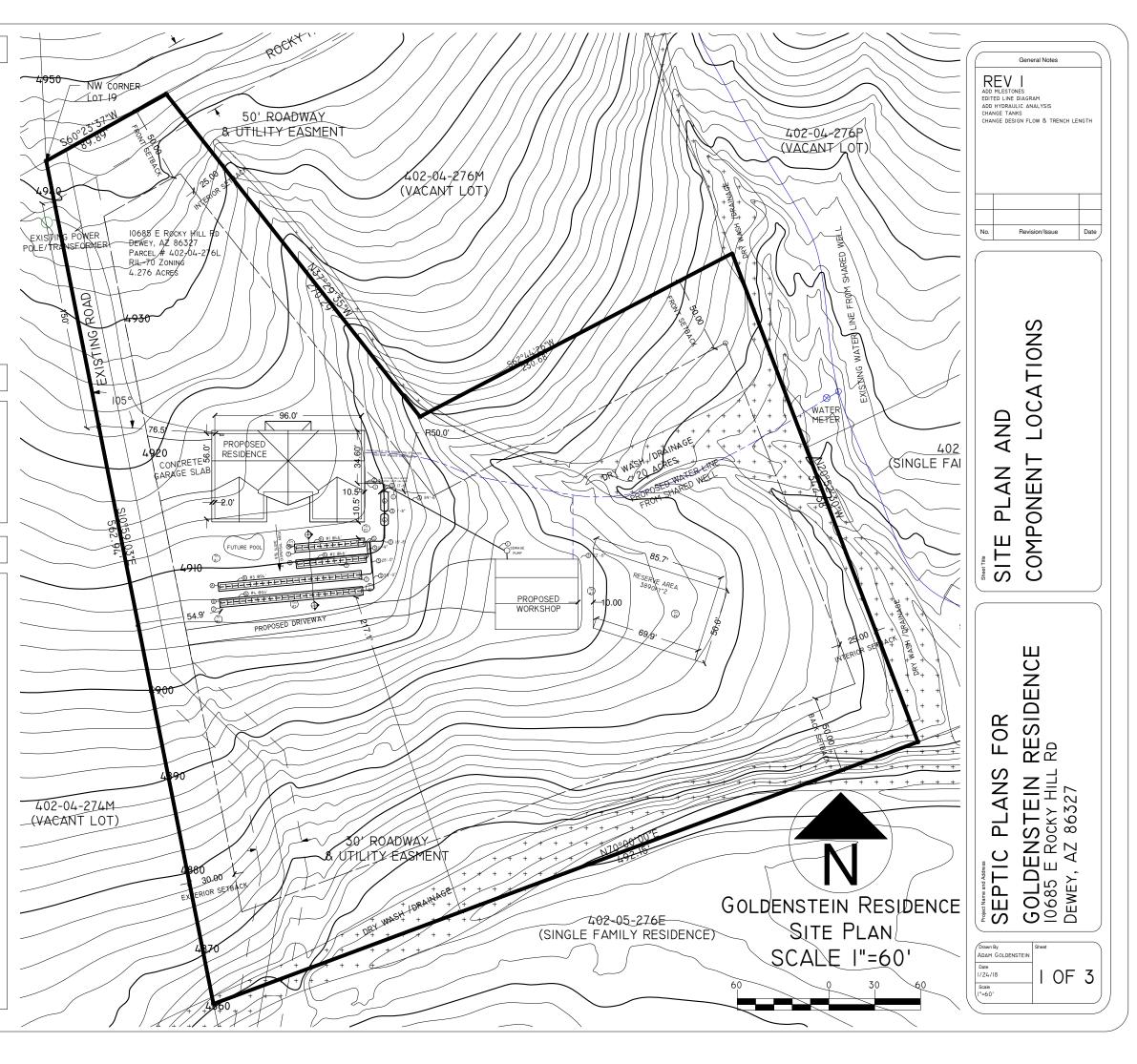


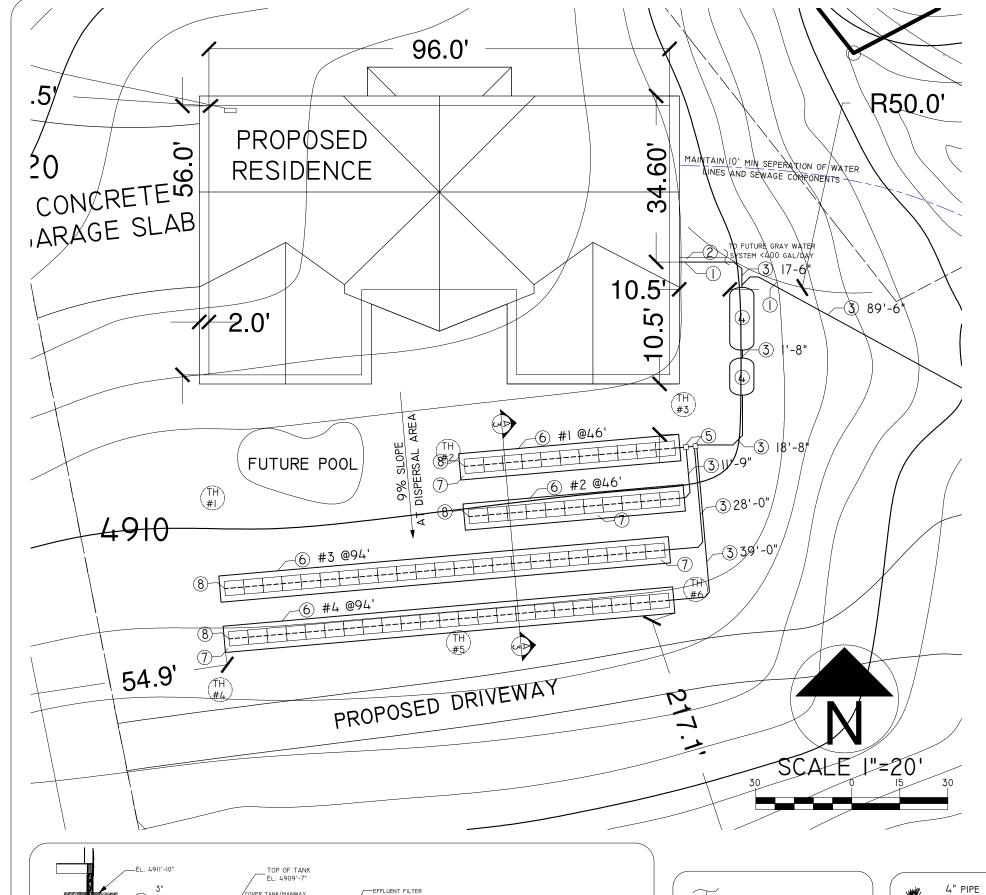
# GENERAL NOTES

- I. SYSTEM DESIGN AND INSTALLATION SHALL COMPLY WITH ARIZONA ADMINISTRATIVE CODE R18-9-A314 AND ELJEN GSF ARIZONA DESIGN & INSTALLATION MANUAL SEPTEMBER 2010, WWW.ELJEN.COM
- 2. HOMEOWNERS MANUAL AND RECOMMENDED MAINTENANCE AVAILABLE FROM HTTP://WWW.ELJEN.COM/LITERATURE

## SITE PLAN NOTES

- I. THERE IS NO PUBLIC SEWER WITHIN 400' OF THE PROPERTY.
- 2. THERE ARE NO WELLS WITHIN 100' OF THE SEPTIC.
- 3. WATER TO BE PROVIDED BY SHARED WELL LOCATED ON ADJACENT PARCEL 402-05-276Q.
- 4. THERE ARE NO WATER LINES WITHIN 10' OF THE SEPTIC.
- 5. ALL SETBACKS ARE MAINTAINED AS SPECIFIED IN TABLE OF R-18-9-A312c.
- 6. SETBACK LIMITATIONS CLOSER THAN 200' AS SPECIFIED IN ARE INDICATED ON SITE MAP RI8-9-A312C
- 7. SURFACE LIMITING CONDITION IDENTIFIED IN RI8-9-A310(C)(2): WASHES TO THE EAST AND SOUTH.
- 8. SUBSURFACE LIMITING CONDITION IDENTIFIED IN RI8-9-A310(D)(2): 5-I2' DEEP TEST HOLES.
- 9. CLEAN OUTS SHALL BE PROVIDED IN THE 4" SEWER SERVICE 2' FROM THE HOUSE AND WORKSHOP.
- 10. ALL EASEMENTS AND RIGHT OF WAYS ARE SHOWN ON SITE PLAN.
- II. DRAINAGE FROM ROOFTOPS OF STRUCTURES SHALL BE DIVERTED FROM THE ABSORPTION AREA
- 12. TRENCHES SHALL BE COVERED WITH A MINIMUM OF 12" OF SOIL BACKFILL.
- 13. PROPERTY CORNERS ARE MARKED WITH STEAKS AND SURVEY TAPE BY A RECENT SURVEY.
- 14. ALL CC&R REQUIREMENTS ARE MET.





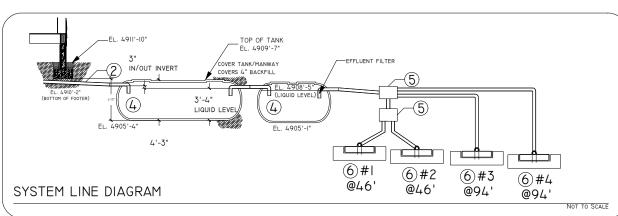
# SEPTIC COMPONENT KEYNOTES

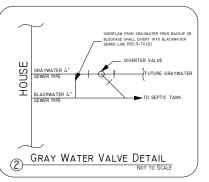
- (I) 2-WAY CLEANOUT
- 2 GRAY WATER VALVE
- 3 4" SDR-35 OR SCHD-40\* SEWER PIPE
- 4 I500 / 750 GAL SINGLE COMPARTMENT SEPTIC TANKS\*\* MEETING ALL REQUIREMENTS OF RI8-9-A314
- (5) DISTRIBUTION BOX SET ON LEVELED MASONRY SURFACE
- 6 ELJEN ENGINEERED PAD TRENCH PER TRENCH DRAWINGS
- 7 INSPECTION PIPES
- (8) 4" VENT PIPE AT END OF EACH TRENCH

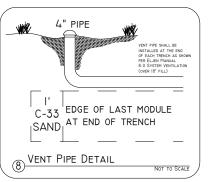
\*SDR-35 "HIGH STRENGTH" PIPE SHALL BE USED WHEN PIPE IS GREATER THAN 2' BELOW GRADE. \*\*POLYTANK SHOWN: SNYDER NEXGEN D2 I500 / 750 ONE COMPARTMENT TANK

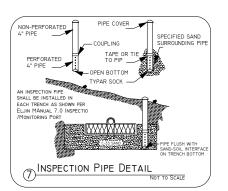
DESIGN CALCS		
SAR (SITE INVESTIGATION)	0.4	
DESIGN TSS/BOD	5/5	
SARA (RI8-9-A312.D.3)	0.885	
DAILY DESIGN FLOW (GAL)	900	
MIN DESIGN LIQ CAP (GAL)	2000	
REQ. ABSORPTION AREA (FT^2)*	1016.6	
B43 AREA PER EACH (FT^2)*	20	
B43 UNITS NEEDED CALC.*	50.8	
B43 UNITS USED	68	
TRENCH LENGTH CALC. (FT)*	203.3	
TRENCH LENGTH USED (FT)	280	
SAND CS AREA (FT^2)	8.02	
SAND VOLUME (FT^3)	2246	
SAND DENSITY (LB/FT^3)	100	
SAND (TON)	II2	
*Design calculations based on Eljen GSF Arizona Design & Installation Manual September 2010, www.eljen.com	·	

		T <u></u>	<u>EST HOL</u>	<u>-ES</u>
TH	DEPTH*	GRADE EL.*	BOTTOM EL.	NOTES
#1	12'	4909.0'	4897.0'	
#2	12'	4909.5'	4897.5'	TH#I-8 SIMILAR BUT VARY TO ROCI
#3	9'	4907.5'	4898.5'	REFUSAL. 0-1' TOPSOIL, 1-8' 70%
#4	5'	4904.5'	4899.5'	ROCK WITH SCL IN MATRIX EVIDENCE OF MOTTLING PRESENT THROUGHOUT INDICATING SEASONAL SATURATION
#5	6'	4903.5'	4897.5'	
#6	12'	4903.5'	4891.5	
#7	12'	4890.0'	4878.0'	
#8	8'	4884.5	4876.5'	









# General Notes REV ADD MLESTONES EDITED LINE DIAGRAM ADD HYDRAULIC ANALYSIS CHANGET ANKS CHANGET ANKS CHANGET DESIGN FLOW & TRENCH LENGTH No. Revision/Issue Date

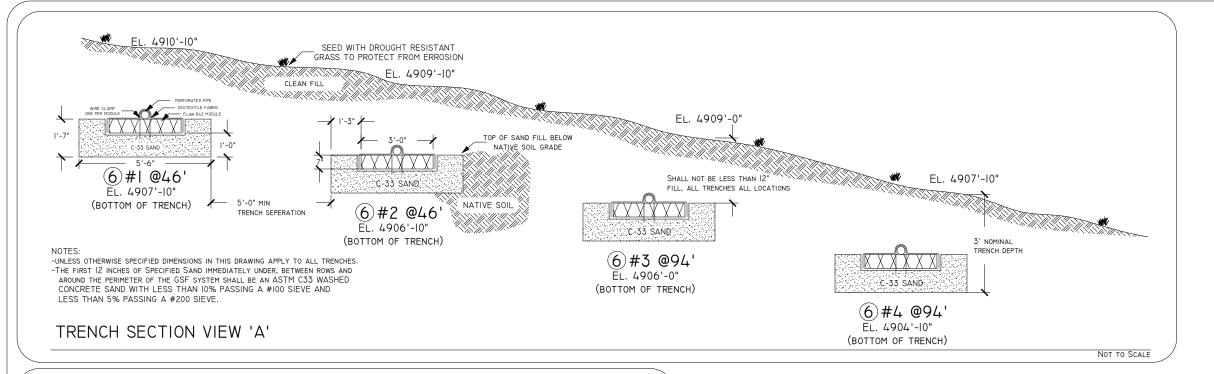
SYSTEM COMPONENTS AND DETAIL DRAWINGS

SEPTIC PLANS FOR
GOLDENSTEIN RESIDENCE
10685 E ROCKY HILL RD
DEWEY, AZ 86327

Drawn By ADAM GOLDENSTEIN

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Date 1/24/18



### HYDRAULIC ANALYSIS METHOD

THE FOLLOWING HYDRAULIC ANALYSIS USED THE METHODOLOGY PRESENTED IN:
"ON-SITE WASTEWATER TREATMENT PROCEEDINGS OF THE NINTH NATIONAL SYMPOSIUM ON INDIVIDUAL AND SMALL COMMUNITY SEWAGE SYSTEMS" MARCH II-14, 2001, EDITED BY: KAREN MANCL, PUBLISHED BY: AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS 2950 NILES ROAD, ST JOSEPH, MICHIGAN 49085-8659 USA

### SITE SOIL CHARACTERISTICS

TEXTURE: SCL, STRUCTURE: BK, GRADE: 2, BOD<30 Mg/L, SLOPE: 6-9%, INFILTRATION DISTANCE: 24-48"

ACCORDING TO TABLE I OF REFERENCED MATERIAL: INFILTRATION LOADING RATE: 0.6 GAL/DAY/FT^2 AND HYDRAULIC LINEAR LOADING RATE: 3.3 GAL/DAY/FT

DIVIDE WASTEWATER VOLUME (900GPD) BY THE HYDRAULIC LINEAR LOADING RATE (3.3 GPD/FT) TO OBTAIN THE LENGTH OF THE DISPERSAL TRENCH: 900GPD / 3.3 GPD/FT\*2 = 272.7FT

Divide wastewater hydraulic linear loading rate (3.3gal/day/ft) by the infiltration loading rate (0.6gal/day/ft^2): 3.3gal/day/ft / 0.6gal/day/ft^2 = 5.5ft

LIMITING TRENCH LENGTH OF HYDRAULIC ANALYSIS (272.7FT) < TRENCH LENGTH USED (280FT)

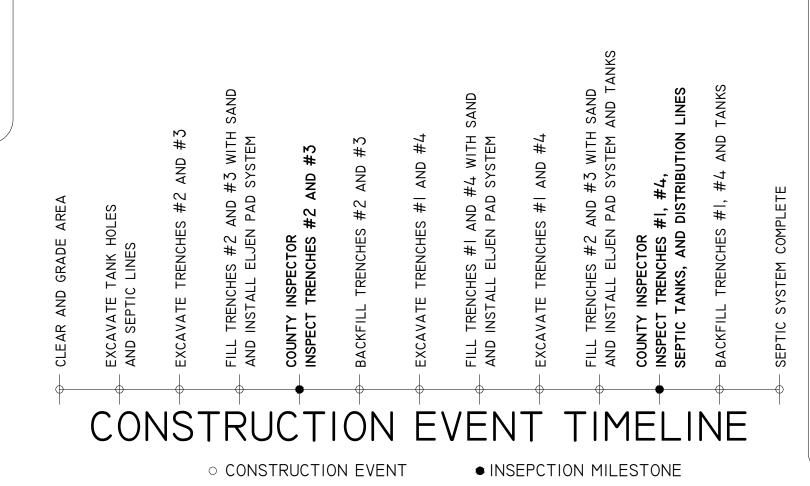
LIMITING TRENCH WIDTH OF HYDRAULIC ANALYSIS (5.5FT) = TRENCH WIDTH USED (5.5FT)

THEREFORE IT IS RECOMMENDED THE SITE CONDITIONS ARE SUFFICIENT TO SUPPORT THE PROPOSED DESIGN FOR RELIABLE OPERATION

# HYDRAULIC ANALYSIS

	LIST OF MATERIALS
l ea	1500 GAL SEPTIC TANK: SNYDER NEXGEN D2 SINGLE COMPARTMENT
l ea	750 GAL SEPTIC TANK: SNYDER NEXGEN D2 SINGLE COMPARTMENT
l ea	EFFLUENT FILTER FOR FIRST SEPTIC TANK
3 YD^3	PEA GRAVEL FOR SEPTIC BEDDING
83 YD^3	ASTM C33 WASHED CONCRETE SAND
252 FT	4" DISTRIBUTION PIPE SDR-35 OR SCHD-40*
272 FT	4" PERFORATED PIPE
l EA	2-OUTLET DISTRIBUTION BOX WITH SEALS
l EA	3-OUTLET DISTRIBUTION BOX WITH SEALS
68 EA	B43 ELJEN PAD UNITS WITH GEOTEXTILE COVER AND WIRE CLAMPS
4 EA	TYPAR SOCK AND TAPE
8 EA	4" PIPE CAPS
_ EA	4" PIPE SDR-35 OR SCHD-40* FITTINGS AND CLEANOUTS AS NEEDED
_ EA	PIPE CEMENT GLUE AS NEEDED

\*SDR-35 "HIGH STRENGTH" PIPE SHALL BE USED WHEN PIPE IS GREATER THAN 2' BELOW GRADE.



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ADAM GOLDENSTEIN

Scale | "=30"

ADD MLESTONES EDITED LINE DIAGRAM ADD HYDRAULIC ANALYSIS CHANGE TANKS

CHANGE DESIGN FLOW & TRENCH LENGTH

Revision/Issue

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