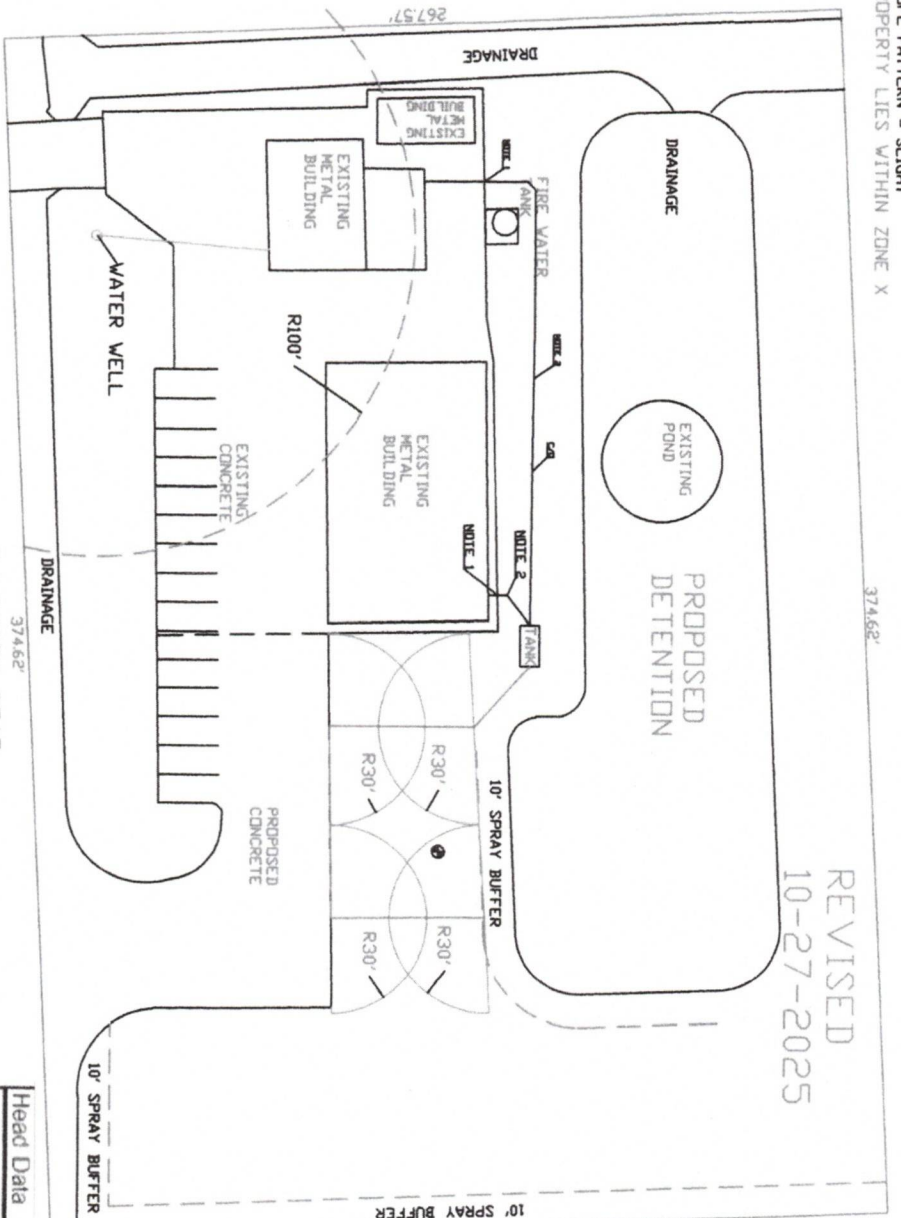


SLOPE PATTERN = SLIGHT
PROPERTY LIES WITHIN ZONE X

37462

REVISED
10-27-2025



LICENSED PROFESSIONAL SANITARIAN



ORGANIC AND HYDRAULIC CALCULATIONS:
 1 EMPLOYEE CONTRIBUTING 10 G.P.D. AND 0.05 LB./BOD/DAY
 (GOLDSTEIN & MORGAN, 1973)
 15 EMPLOYEES X 0.05 LB./BOD = 0.75 LB./BOD/DAY
 0.75 LB./BOD/DAY / 9 HOURS = 0.08 LB./BOD/HOUR
 150 G.P.D. / 9 HOURS = 16.6 GALLONS PER HOUR
 TYPICAL 600 G.P.D. ATU WILL TREAT 150 LB./BOD/DAY
 600 G.P.D. X 40% / 3 HOURS = 80 GALLONS PER HOUR
 150 LB./BOD X 40% / 3 HOURS = 0.20 LB./BOD/HOUR
 (90 G.P.H. > 15.6 G.P.H) & (0.20 LB./BOD/HOUR > 0.08 LB./BOD/HOUR)
 THEREFORE A 600 G.P.D. ATU SHOULD SURFACE WITHOUT DOSING

AEROBIC SYSTEM MUST BE INSTALLED IN ACCORDANCE WITH TAC 30 CHAPTER 285 O.S.S.F. RULES AND AUSTIN COUNTY'S LOCAL ORDER

CHLORINATION DEVICE MUST BE NSF STANDARD 46 APPROVED AND CAPABLE OF DISINFECTION TOTAL DAILY FLOW

PUMP HEAD=92'
 ELEVATION HEAD= 6'
 FRICTION HEAD=14.5'
 TOTAL HEAD= 112.5'

4-30"R SPRAY HEADS @3.0 GPM

Head Data					
Pipe Size	Loss / 100 Feet	Pipe Friction	Length of Pipe (ft)	Friction Head	Total Head
1	3.28	3.936	178	7.00608	14.50608

AEROBIC TREATMENT REQUIRED = 600 GALS. MINIMUM
 MINIMUM PUMP TANK SIZING = 480 GALS.
 THE HIBLOW HB-80 AERATOR OPERATES @ 4.2 CFMS
 NO WATER FILTER OR WATER SOFTENER SHALL ENTER AEROBIC SYSTEM
 1/2 OF THE DAILY REQUIRED FOR PRETREATMENT TANKS

LEGEND:
 TANKS = 500 gal. PRETREATMENT TANK
 600 G.P.D. AEROBIC TREATMENT UNIT
 750 gal. PUMP TANK w/ CHLORINATOR

C/D = 2 WAY CLEAN-OUTS AT ALL STUB-OUTS FROM HOUSE
 1 WAY CLEAN-OUTS EVERY 100' AND AT EVERY 90°
 TURN IN DIRECTION
 --r-- = RADIAL DISTANCE INDICATED ABOVE
 ● = BORE HOLE SITE



NOTE 1 = 2 WAY CLEAN-OUTS AT ALL STUB-OUTS FROM HOUSE
 1 WAY CLEAN-OUTS EVERY 100' AND AT EVERY 90°
 NOTE 2 = PIPE TO BE 3" OR 4" SCH 40 PVC OR SDR 26 PIPE
 WITH A MINIMUM OF 1/8" OF FALL PER FOOT TO TANKS

CALCULATION SUMMARY:
 TOTAL NUMBER OF EMPLOYEES: 15 (< 10 G.P.D. EACH)
 Q = 150 G.P.D.
 APPLICATION RATE: 0.045 gal./sq.ft./DAY
 TOTAL SPRAY AREA REQUIRED = 3,334 sq.ft.
 TOTAL SPRAY AREA DESIGNED = 5,560 sq.ft.
 INSTALL 3 PURPLE TOP SPRAY HEADS WITH APPROPRIATE LOW ANGLE NOZZLES
 HEADS SHALL NOT EXCEED 40 p.s.i. WITH INSTALLED NOZZLES TO SPRAY A 30R
 SPRINKLER TIMER SHALL BE SET TO SPRAY BETWEEN MIDNIGHT AND 5:00 A.M.
 DESIGN BASED ON FINDINGS BY SITE EVALUATOR

NAME: ADDRESS: 15002 BJ DUSEK ROAD
 CITY STATE, ZIP: WALLIS, TX. 77485
 SURVEY: JEREMIAH S. O'CONNOR LEAGUE
 ABSTRACT: 66
 ACREAGE: 2.258
 DESIGNER: WES HUBERT
 PHONE #: (936) 597-5558
 FAX #: (936) 597-8332
 DATE: 05-18-2024
 SCALE: 1" = 60'