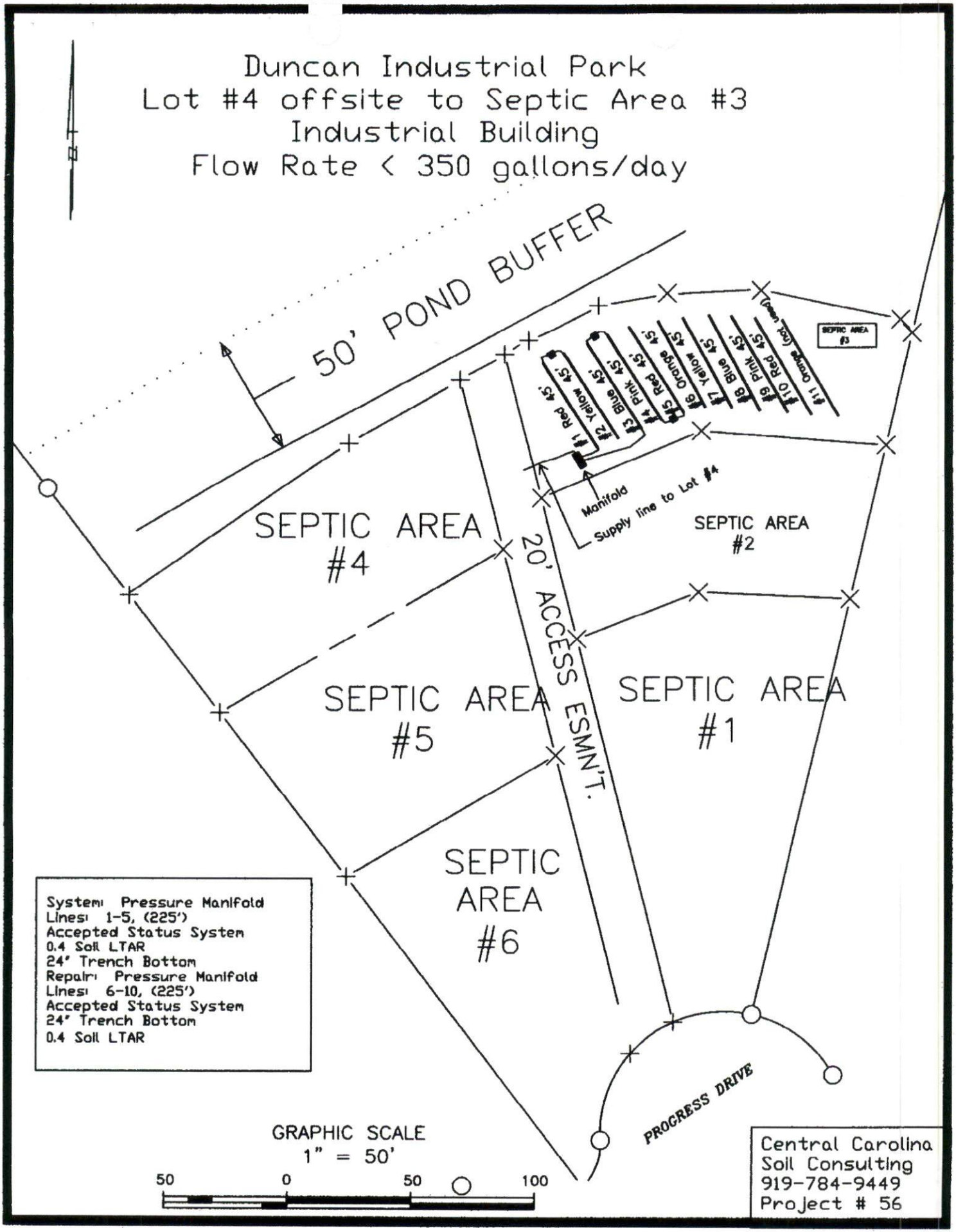
# Duncan Industrial Park
## Lot #4 offsite to Septic Area #3
## Industrial Building
## Flow Rate < 350 gallons/day




System: Pressure Manifold
Lines: 1-5, (225')
Accepted Status System
0.4 Soil LTAR
24" Trench Bottom
Repair: Pressure Manifold
Lines: 6-10, (225')
Accepted Status System
24" Trench Bottom
0.4 Soil LTAR

GRAPHIC SCALE
1" = 50'
50 0 50 100

Central Carolina
Soil Consulting
919-784-9449
Project # 56

***Duncan Industrial Park***

***Lot 4***

Industrial Building (Flow Rate up to 350 gallons/day)

| LINE # | COLOR | BS | HI | FS | ELEVATION | LINE LENGTH in field | Design Length installation |
|---|---|---|---|---|---|---|---|
| TBM | | 12.0 | | 100.0 | | | |
| INST. 1 | | | 112.0 | | | | |
| 1 | Red | | | 2.7 | 109.3 | 45 | 45 |
| 2 | Yellow | | | 3.2 | 108.8 | 45 | 45 |
| 3 | Blue | | | 3.7 | 108.3 | 45 | 45 |
| 4 | Pink | | | 4.3 | 107.7 | 45 | 45 |
| 5 | Red | | | 4.9 | 107.1 | 45 | 45 |
| 6 | Orange | | | 5.5 | 106.5 | 45 | 45 |
| 7 | Yellow | | | 6.1 | 105.9 | 45 | 45 |
| 8 | Blue | | | 6.8 | 105.2 | *47* | *45* |
| 9 | Pink | | | 7.5 | 104.5 | *47* | *45* |
| 10 | Red | | | 8.3 | 103.7 | *47* | *45* |
| 11 | Orange | | | 9.0 | 103 | *47* | *not used* |
| | | | | | Total | 503 | *405* |

| | System<br>Lines 1-5 | Repair<br>Lines 6-10 |
|---|---|---|
| **System Type** | Accepted Status System<br>EZ-FLOW | Accepted Status System<br>EZ-FLOW |
| **Suggested Soil LTAR**<br>(gal/day/ft2) | 0.4 | 0.4 |
| System Installation LTAR | 0.4 | 0.4 |
| **Total Line Length** | 225 | 225 |
| **Square Footage** | 675 | 675 |
| **Proposed Trench Bottom** | 24" | 24" |
| **Distribution Method** | Pressure Manifold | Pressure Manifold |

Notes: Supply line length to be determined once tank locations are established
Line #1 will step down to Line #2
Line #3 will step down to Line #4
Line #4 will step down to Line #5

Sheet1

# Duncan Industrial Park
## Lot #4 TAP CHART

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Bench Mark** | 12.00 | is = 100.00 | Location of BM | | | | | **Elevation Head** | 9.80 |
| **Pump tank elev.** | | 6.5 | 105.50 | **Pump elev.** | 100.50 | | **Manifold elev.** | | 110.30 |
| **line** | **color** | **rod read** | **Elevation** | **length** | **hole size** | **flow/tap** | **gal/day** | **trench area** | **LINE LTAR** |
| 1 & 2 | Pink | 2.70 | 109.30 | 90 | 1/2in SCH 40 | 7.11 | 148.73 | 270 | 0.5508 |
| 3 & 4 & 5 | Red | 3.70 | 108.30 | 135 | 3/4in SCH 80 | 10.1 | 211.27 | 405 | 0.5217 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **total** | **feet =** | **225** | **gal/min =** | **17.21** | **LTAR =** | **0.4000** |
| | | | | | | **LTAR + %5** | **0.4200** |
| **% of Dose Vol.** | 70 | | **Des. Flow** | **360** | | **(ltar W/ INOV)** | 0.5333 |
| **Dose Volume** | 102.38 | | **Pump Run=** | 20.92 | | **(ltar W/ INOV + 5%** | 0.5600 |
| **Dose Pump Time** | 5.95 | | **Tank Gal/IN** | 21 | | | |
| **Drawdown In Inches** | 4.88 | | | | | | |

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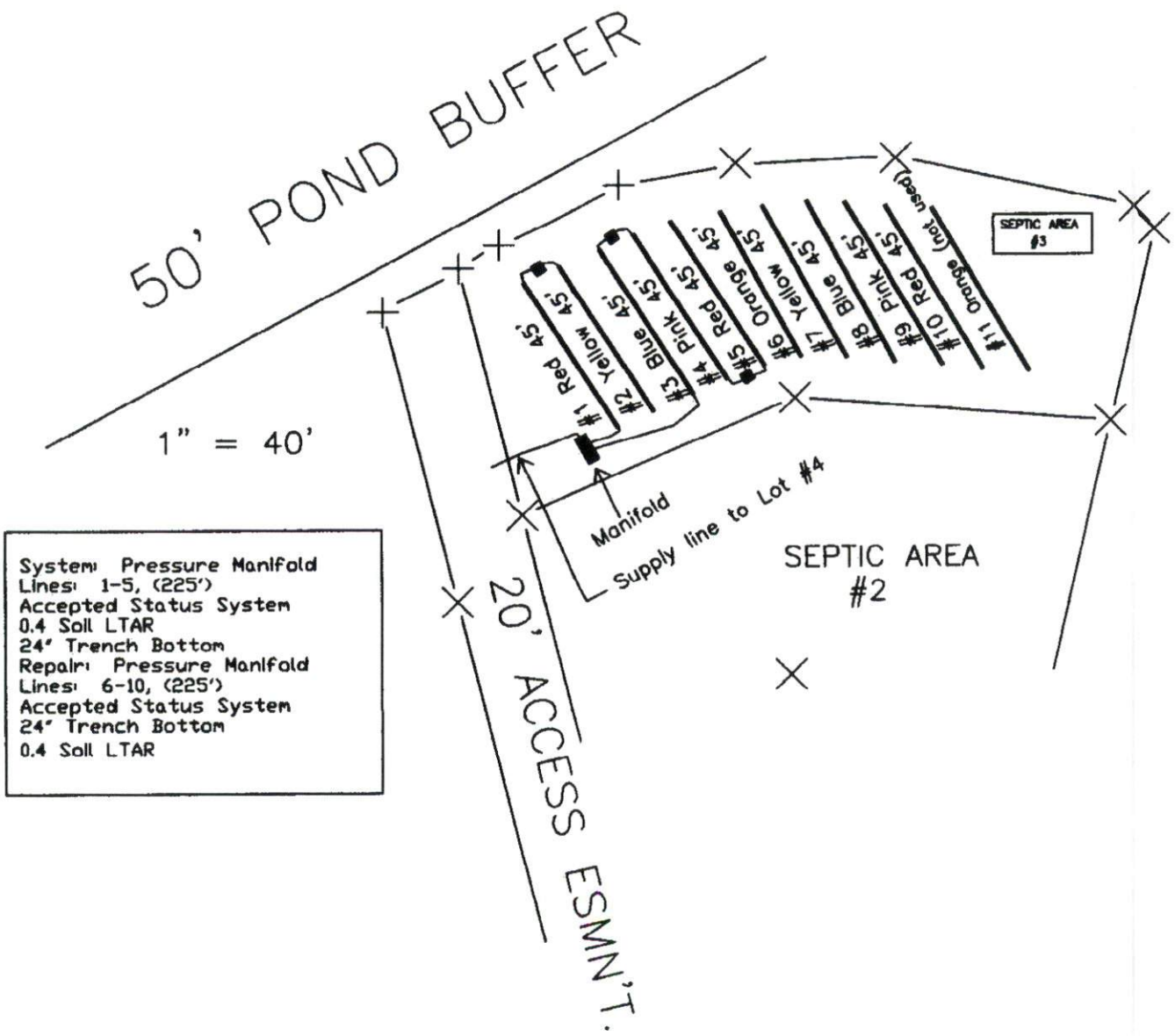


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24" Trench Bottom
0.4 Soil LTAR

SCALE 1" = 120' MARCH 16, 2005
REVISED: SEPT 28, 2006 (PER COUNTY COMMENTS)

MAULDIN - WATKINS SURVEYING, P.A.
P.O. BOX 444 / 1301 W. BROAD ST.
FUQUAY VARINA, NORTH CAROLINA 27526
(919) 552-9326

JOB #2707
CF:2707 PF:2707RM

PLAT NORTH
(MAP #2000 PG.681)

N

| COURSE | BEARING | DISTANCE |
|---|---|---|
| E1 | N 13°57'25"W | 126.50' |
| E2 | N 13°57'25"W | 88.09' |
| E3 | N 13°57'25"W | 72.38' |
| E4 | N 13°57'25"W | 162.86' |
| E5 | N 13°57'25"W | 60.02' |
| E6 | N 13°57'25"W | 61.50' |
| E7 | N 54°44'10"E | 108.85' |
| E8 | N 59°45'03"E | 52.16' |
| E9 | N 59°26'16"E | 133.10' |
| E10 | N 59°26'16"E | 98.40' |
| E11 | N 59°45'03"E | 20.84' |
| E12 | N 59°45'03"E | 11.11' |
| E13 | N 62°54'04"E | 31.88' |
| E14 | N 79°24'00"E | 28.26' |
| E15 | N 88°22'06"E | 37.83' |
| E16 | S 77°50'26"E | 57.89' |
| E17 | S 39°57'35"E | 7.30' |
| E18 | N 66°33'58"E | 70.53' |
| E19 | S 85°23'40"E | 74.92' |
| E20 | N 68°25'23"E | 52.82' |
| E21 | S 87°24'47"E | 61.24' |

| CURVE | RADIUS | LENGTH | CHORD | CH.BEARING |
|---|---|---|---|---|
| E-C1 | 50.00' | 38.71' | 37.75' | N 18°25'31"E |
| E-C2 | 50.00' | 21.89' | 21.71' | N 53°08'30"E |
| E-C3 | 50.00' | 32.35' | 31.79' | N 84°13'02"E |

| CURVE | RADIUS | LENGTH | CHORD | CH.BEARING |
|---|---|---|---|---|
| C15 | 255.00' | 5.94' | 5.94' | N 55°52'24"E |
| C16 | 255.00' | 47.92' | 47.85' | N 49°49'20"E |
| C17 | 25.00' | 21.03' | 20.41' | N 68°31'59"E |
| C18 | 50.00' | 105.68' | 87.08' | N 32°04'42"E |
| C19 | 50.00' | 42.56' | 41.29' | N 52°51'32"W |
| C20 | 50.00' | 92.94' | 80.13' | S 49°30'03"W |
| C21 | 25.00' | 21.03' | 20.41' | S 20°20'36"W |
| C22 | 205.00' | 43.30' | 43.22' | S 50°29'21"W |
| C23 | 230.00' | 48.58' | 48.49' | N 50°29'21"E |

| COURSE | BEARING | DISTANCE |
|---|---|---|
| L13 | N 70°08'42"W | 31.17' |
| L14 | N 70°08'42"W | 31.17' |
| L15 | N 44°26'17"E | 14.61' |