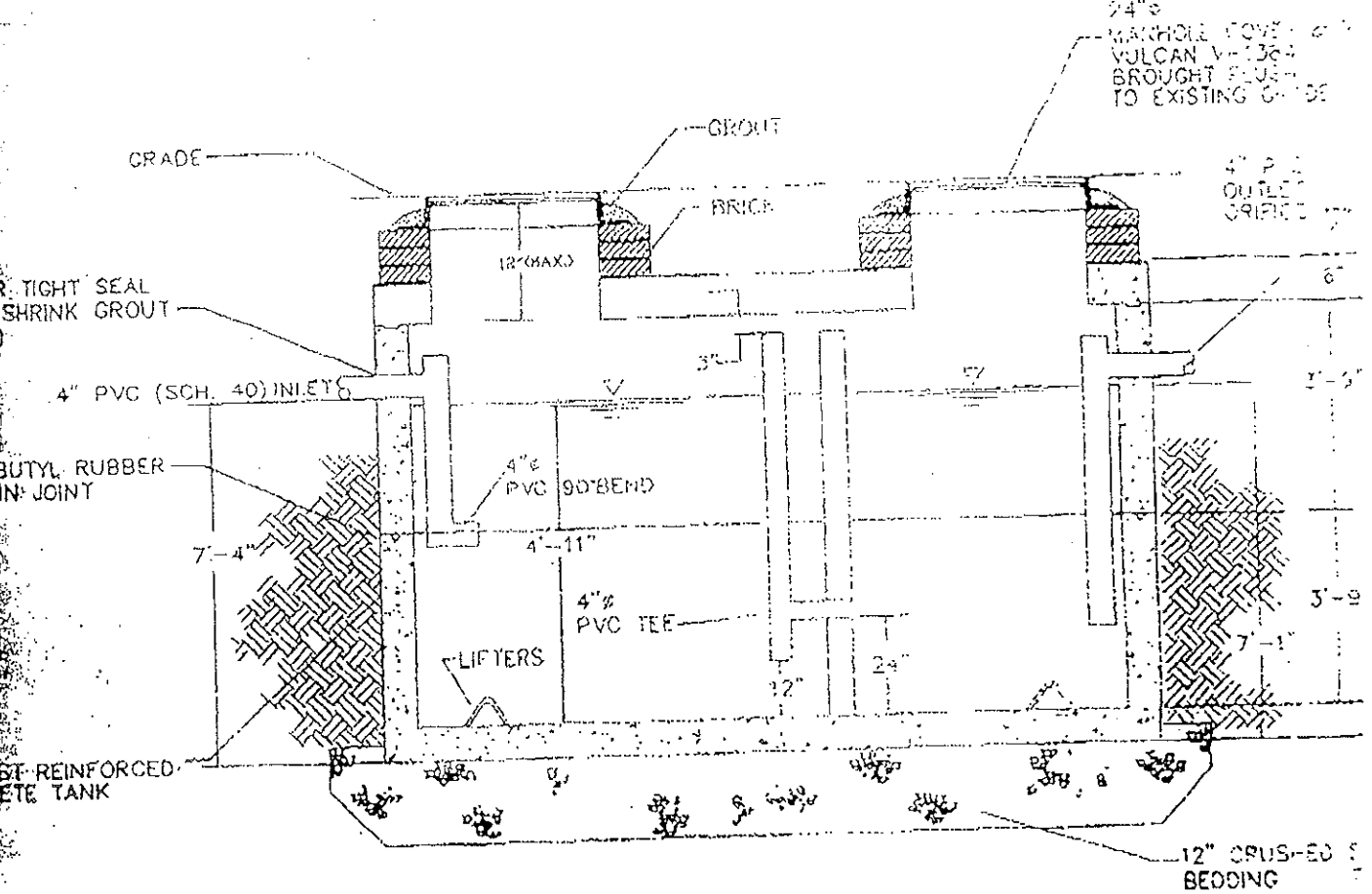
MAY 22 '03 11:29 TAYLORSVILLE PRECAST
ECIMORE, PRESIDENT
ORSVILLE MFG. RD.
SVILLE, NC 28681

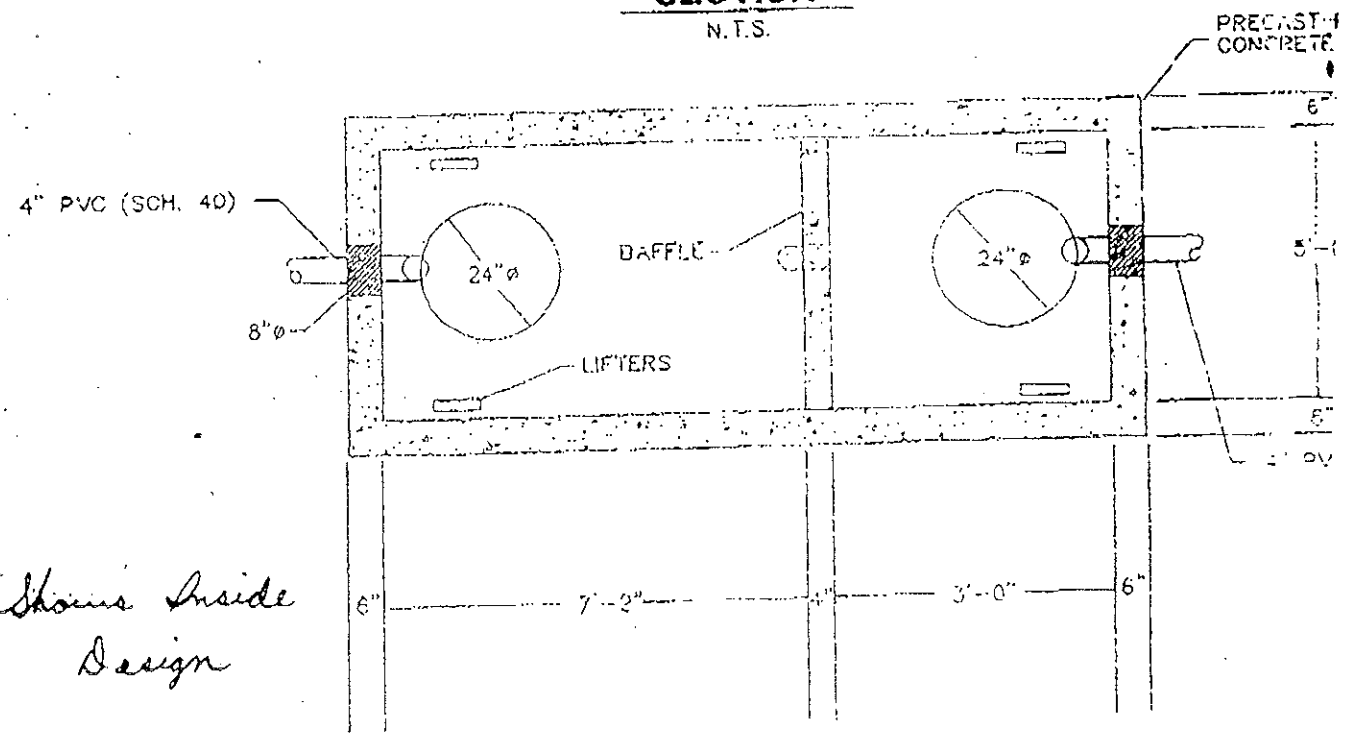
TAYLORSVILLE PRECAST MOLDS, INC.

TEL: 3
828-632-4608 Office
828-632-4609 FAX



SECTION

N.T.S.



Shown Inside Design

PLAN

N.T.S.

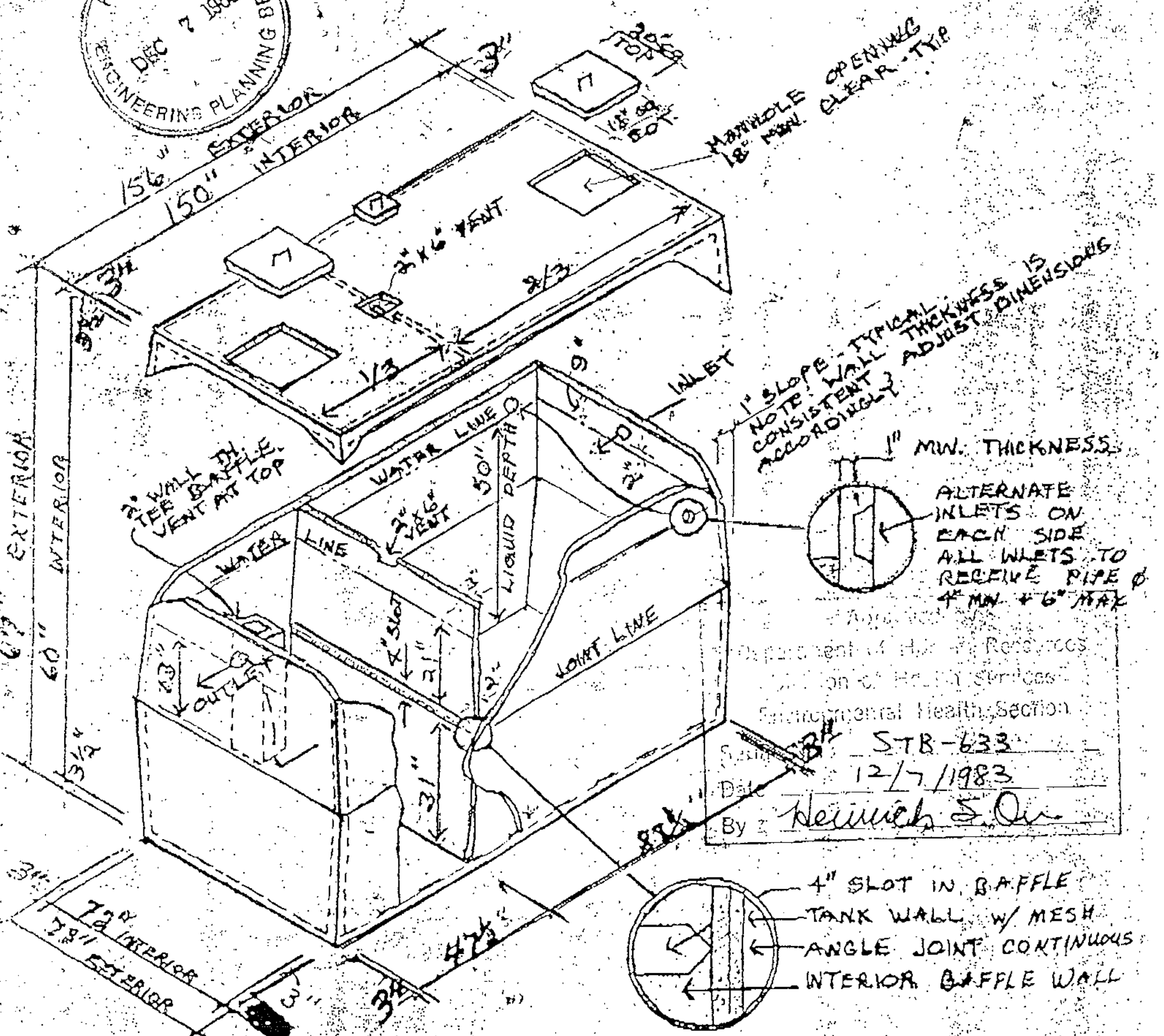
MFG. By : Taylorsville Precast Molds, Inc.
ADDRESS: 128 Taylorsville Mfg. Rd
Taylorsville, NC 28681
PHONE 828-632-4608

TWO COMPARTMENT TANK

CONCRETE : 3,000 PSI
REINFORCING: 6" x 6" x 10/10 WIRE MESH (ALL FACES AND BAFFLE)
LIQUID DEPTH: 50" FREEBOARD 10"
LENGTH TO WIDTH RATIO: 2.2 TO 1
TYPE OF INLET: STRAIGHT PIPE
TYPE OF OUTLET: CAST IN PLACE BAFFLE 2/5th. LIQUID DEPTH
MANHOLE: TWO @ 18" Sq. CLEAR OP'S
LIQUID CAPACITY: 2000 GALLONS
MANHOLE HANDLE: #3 REBAR

NOTE 1 TANK SIZE + MFGR'S IDENTIFYING IMPRINT TO BE AT RIGHT OF OUTLET OPENING

RECEIVED DEC 7 1983 ENGINEERING PLANNING BRANCH



Approved
Department of Human Resources
Division of Health Services
Environmental Health Section
STR-633
Date 12/7/1983
By: Heinrich S. Qu...

MFG. BY: Taylorsville Precast Molds, Inc.
Rt. 3, Box 88
Taylorsville, NC 28681
704-632-4608

NOTE: Tank size and Mfg's identifying imprint & date to be at left of outlet opening

RECEIVED
MAY 9 1997
ENV. HEALTH SERVICES SECTION

TWO COMPARTMENT TANK-PUMP TANK

CONCRETE-4000 PSI

REINFORCING- 6" x 6" 10/10 wire mesh
1/2" rebar 9" on center - All faces and baffle

LIQUID DEPTH- 65" FREEBOARD 10"

LENGTH TO WIDTH RATIO - 2.2 to 1

TYPE OF INLET - Straight Pipe

TYPE OF OUTLET- Cast in Place Baffle
⅔ liquid depth

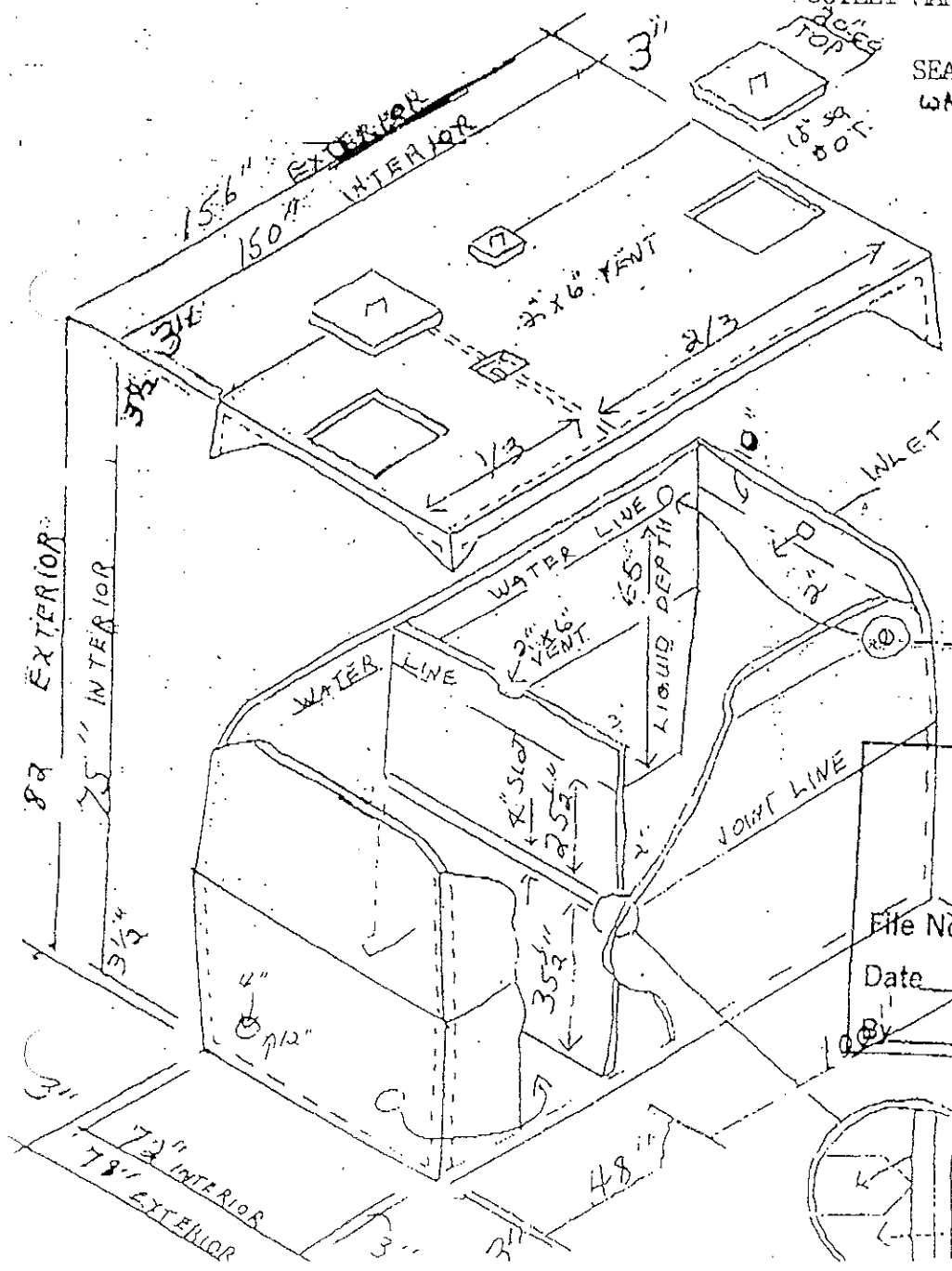
INLET MANHOLE - One 18" square OP's

LIQUID CAPACITY - 3500 gallons

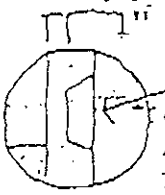
MANHOLE HANDLE - #3 Rebar

OUTLET MANHOLE - one 24" square OP's or
24" round OP's

SEALED WITH 1" Rubber Seal
WATERPROOFED W/ MORTAR MIX



1" Slope - Typical
Note: Wall thickness is consistent - Adjust dimension accordingly



Alternate inlets on each side - All inlets to receive pipe 4" min & 6" max

Approved By
On-Site Sewage Branch
Env. Health Services Section
Div. of Env. Health, DEHNR
File No. 3" PT-97
Date 6/7/97
By

DAVID R. MECIMORE, PRESIDENT

128 TAYLORSVILLE MFG. RD.
TAYLORSVILLE, NC 28681

TPM TAYLORSVILLE PRECAST MOLDS, INC.

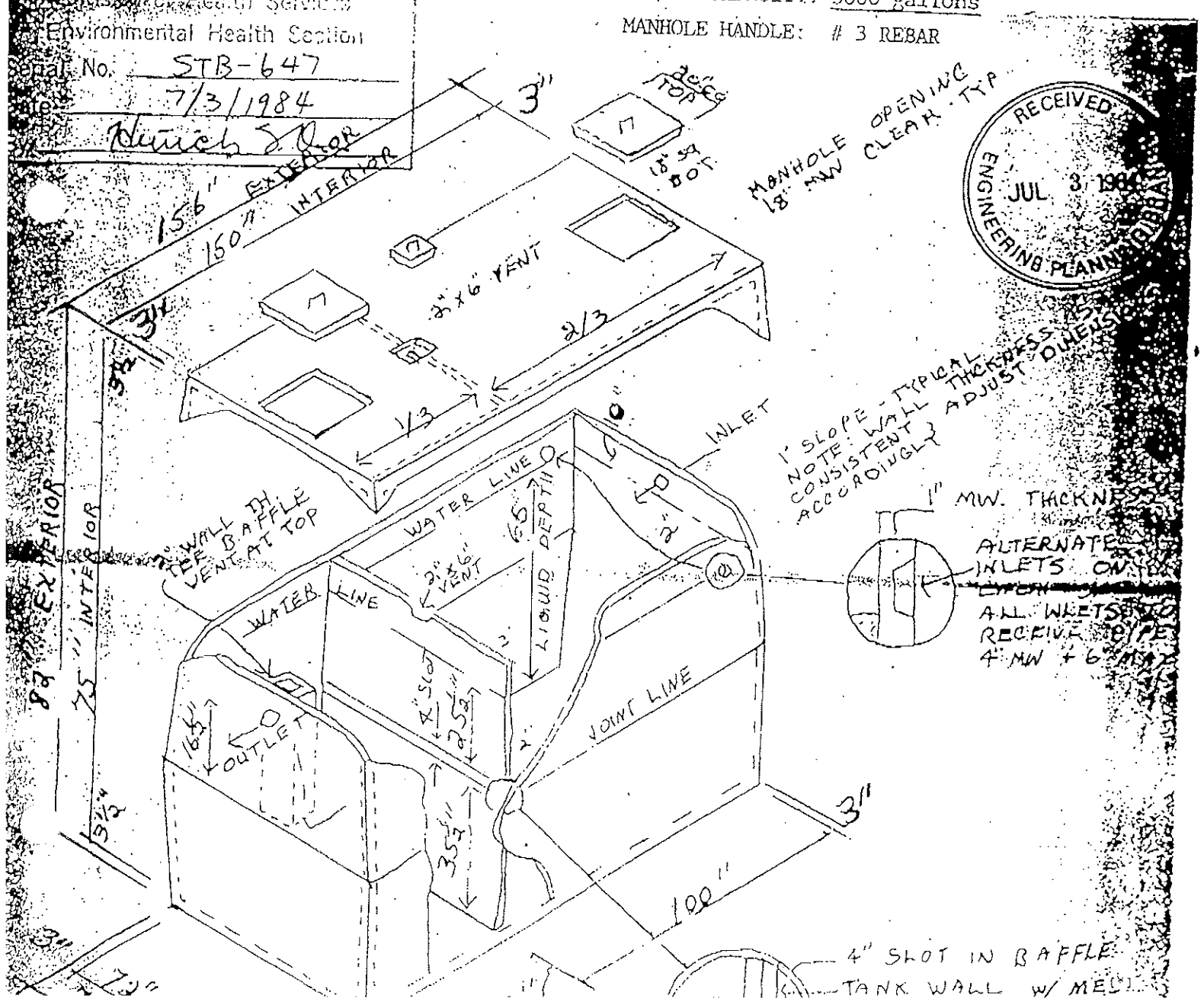
TELEPHONE:
828-632-4608 Office
828-632-4609 FAX

Note: Tank size & Mfgr's. identifying imprint to be at right of outlet opening

TWO COMPARTMENT TANK
CONCRETE: 4000 PSI
REINFORCING: 6" x 6" 10/10 wire mesh
½ Rebar All faces & baffle
LIQUID DEPTH 65" FREEBOARD 10"
LENGTH TO WIDTH RATIO: 2.2 TO 1
TYPE OF INLET: STRAIGHT PIPE
TYPE OF OUTLET: CAST IN PLACE BAFFLE
½ liquid depth
MANHOLE: TWO 18" SQUARE OP'S
LIQUID CAPACITY: 3000 gallons
MANHOLE HANDLE: # 3 REBAR

Department of Human Resources
Division of Health Services
Environmental Health Section
Serial No. STB-647
Date 7/3/1984
Approved [illegible]

RECEIVED
JUL 3 1984
ENGINEERING PLANNING BRANCH



SYSTEM HEADLOSS CALCULATIONS

$TDH = \Delta H + h_m + h_f$

where:

ΔH = elevation head

h_f = minor assembly losses, utilizing Moody-type friction losses

h_m = major pipe losses, utilize Hazen Williams equn.

$h_f = K/(v^2/2g)$ where:K is dimensionless, v in ft/s, g in ft/s^2

$h_m = (4.727\ L/\ d^{4.87})\ (Q/C)^{1.85}$ where: Q in cfs, L in feet, d in ft.

no user input
user input req'd

Piping: pvc
Diameter = 2 inches equals 0.166667 ft.

NODE: PT to Manifold # 1

INPUTS			Elevation Head Loss		Major Losses		Minor Losses
No. inputs	Fittings	Details	Initial Elev.	Final Elev.	L	"C"	"K"
1	Pipe	2 IN	909.0	890.0	716	130	
1	Valve	gate					0.4
0	Tee	flanged					0.9
0	Check	flanged					4.0
4	90	flanged					0.4
2	sharp entrance						0.8
2	sharp exit						0.8
							5.12

Q (gpm)	ΔH	hf (feet)	hm (feet)	TDH	PSI
5	-19.00	0.02	0.61	-18.37	-8.0
10	-19.00	0.08	2.21	-16.71	-7.2
15	-19.00	0.19	4.69	-14.13	-6.1
20	-19.00	0.33	7.98	-10.68	-4.6
25	-19.00	0.52	12.07	-6.41	-2.8
30	-19.00	0.75	16.92	-1.34	-0.6
35	-19.00	1.02	22.51	4.52	2.0
40	-19.00	1.33	28.82	11.15	4.8
45	-19.00	1.68	35.85	18.53	8.0
50	-19.00	2.08	43.57	26.64	11.5
55	-19.00	2.51	51.98	35.49	15.4
60	-19.00	2.99	61.07	45.06	19.5
65	-19.00	3.51	70.83	55.33	24.0

SYSTEM HEADLOSS CALCULATIONS

$TDH = \Delta H + h_m + h_f$

where:

ΔH = elevation head

h_f = minor assembly losses, utilizing Moody-type friction losses

h_m = major pipe losses, utilize Hazen Williams equn.

$h_f = K/(v^2/2g)$ where:K is dimensionless, v in ft/s, g in ft/s^2

$h_m = (4.727\ L/\ d^{4.87})\ (Q/C)^{1.85}$ where: Q in cfs, L in feet, d in ft.

no user input
user input req'd

Piping: pvc
Diameter = 2 inches equals 0.166667 ft.

NODE: PT to Manifold # 2

INPUTS			Elevation Head Loss		Major Losses		Minor Losses
No. inputs	**Fittings**	**Details**	Initial Elev.	Final Elev.	L	"C"	"K"
1	Pipe	2 IN	909.0	890.0	827	130	
1	Valve	gate					0.4
0	Tee	flanged					0.9
0	Check	flanged					4.0
4	90	flanged					0.4
2	sharp entrance						0.8
2	sharp exit						0.8

5.12

Q (gpm)	ΔH	hf (feet)	hm (feet)	TDH	PSI
5	-19.00	0.02	0.71	-18.27	-7.9
10	-19.00	0.08	2.55	-16.36	-7.1
15	-19.00	0.19	5.41	-13.40	-5.8
20	-19.00	0.33	9.22	-9.45	-4.1
25	-19.00	0.52	13.94	-4.54	-2.0
30	-19.00	0.75	19.54	1.29	0.6
35	-19.00	1.02	26.00	8.01	3.5
40	-19.00	1.33	33.29	15.62	6.8
45	-19.00	1.68	41.40	24.08	10.4
50	-19.00	2.08	50.32	33.40	14.5
55	-19.00	2.51	60.04	43.55	18.9
60	-19.00	2.99	70.54	54.52	23.6
65	-19.00	3.51	81.81	66.31	28.7

DESIGN FLOW & DRAINFIELD CALCULATIONS
Arby's Statesville

No. Units	Design flow/unit (gpd)	Total Design Flow (gpd)	Actual LTAR (gpd/ft^2)	Design LTAR (gpd/ft^2)	D-field Trench Bottom Area (ft^2)	Design Trench Width (ft)	Total Lateral Length (ft)
74	40	2960	0.25	0.25	11840	3.0	3947

Estimated Indiv. Lateral Length (ft.)	Estimated No. Laterals	Separation Distance (ft.)	Estimated Total Built D-field (ft^2)	Estimated Total Area w/ Repair (ac.)
100	40	9	35520	1.63

MINIMUM DOSE VOLUME CALCULATIONS

PIPING SYSTEM VOLUME

	Length (ft)	Diameter (in)	Volume (gal.)	
PT to Manifold	830	2	135.378	
Manifold to Laterals	230	3	84.407	
Laterals	2000	1	81.553	
		Min. Dose =	301	gal.
		Typ. Dose (3x) =	904	gal.