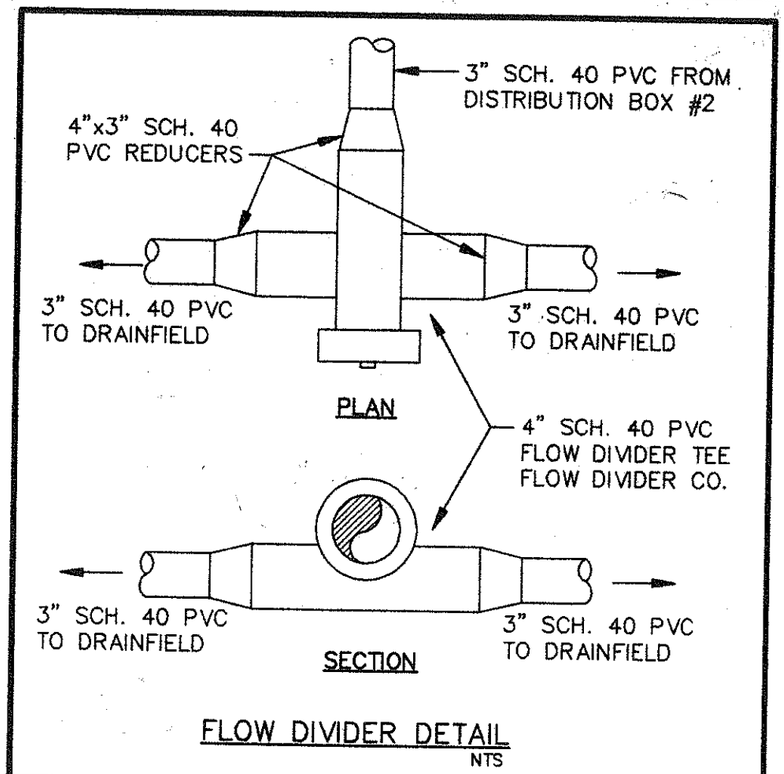
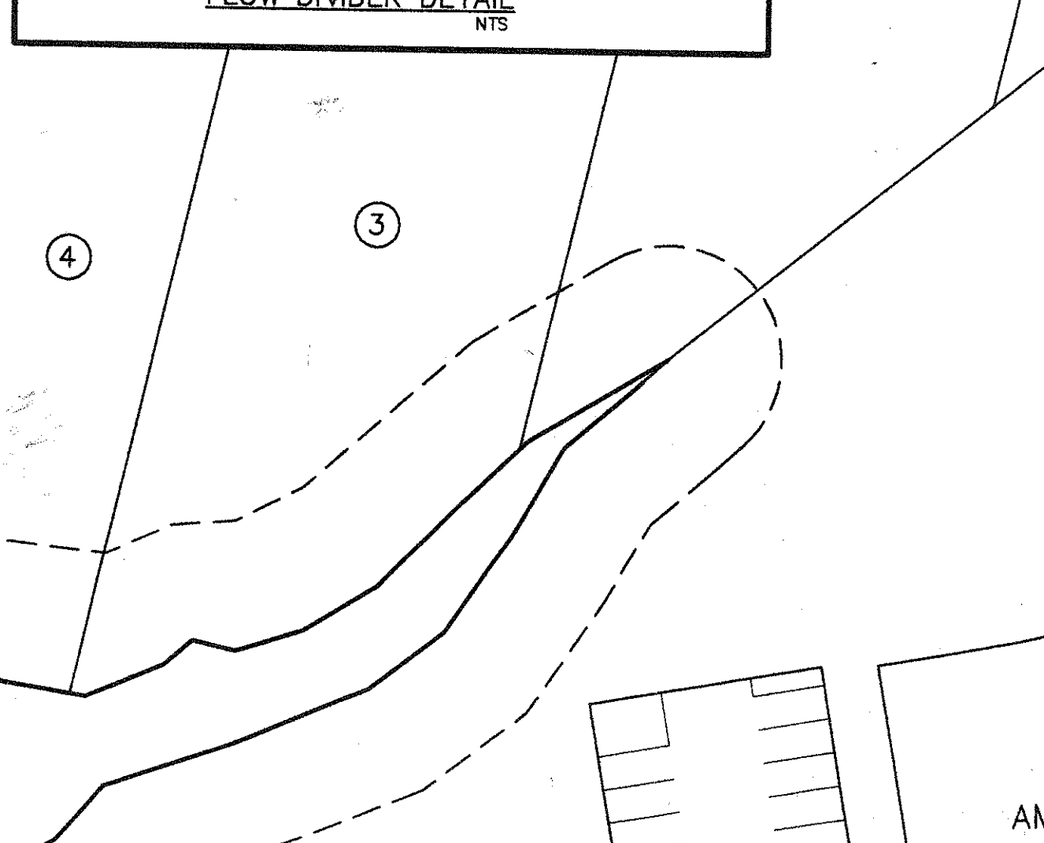
DRAINFIELD NOTES:

1. ALL PERFORATED LINES SHALL BE MINIMUM LENGTH AS SHOWN.
2. RESERVE AREAS SHALL REMAIN NATURAL AND UNDISTURBED. PROPOSED FIELD AREAS SHALL BE CLEARED AND DEBRIS DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE REGULATIONS. TREES AND UNDERGROWTH SHALL BE REMOVED AND GROUND SURFACE LEFT UNIFORM. CONTRACTOR SHALL TAKE CARE TO MINIMIZE DISTURBANCE TO NATURAL SOILS. CLEARING ACTIVITIES SHALL NOT BE ALLOWED UNTIL THE THIRD DAY AFTER A SIGNIFICANT RAINFALL EVENT (i.e. GREATER THAN 1/3 in./24 hrs.) ALL CONSTRUCTION ACTIVITY SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE REGULATIONS OF THE N.C. SEDIMENTATION CONTROL COMMISION. DRAINFIELD CONTRACTOR SHALL NOT COMMENCE WORK UNTIL EROSION CONTROL DEVICES HAVE BEEN INSTALLED BY SITE GRADING CONTRACTOR.
3. SEE SPECIFICATIONS FOR SEEDING REQUIREMENTS.
4. GRAVEL FOR DRAINFIELD TRENCHES SHALL BE STOCKPILED IN THE AREA OF THE PROPOSED PARKING LOT - NOT ON THE FIELD AREAS.
5. THE LOCATION FOR THE PROPOSED SEPTIC TANK, PUMP TANK, AND DRAINFIELDS SHALL BE FIELD STAKED AND INSPECTED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE IREDELL COUNTY HEALTH DEPARTMENT FOR A LOCATION VERIFICATION PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENT FOR A FINAL CERTIFICATION BY THE ENGINEER FOR COMPLETION. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE ENGINEER AND REGULATORY REPRESENTATIVES AT ALL TIMES. INSPECTION OF ALL COMPONENT INSTALLATION IS REQUIRED PRIOR TO BACKFILLING.
7. CONTRACTOR SHALL INSTALL SILT FENCING OR OTHER DEVICES AS NECESSARY OR AS REQUIRED BY THE IREDELL COUNTY EROSION CONTROL INSPECTOR.
8. ACTUAL FIELD LINE LOCATION BY RAY WAUGH AND TONEY JACOBS.
9. TENNIS COURTS, POOL, CLUBHOUSE, AND PARKING SHOWN FOR REFERENCE ONLY. THESE PLANS DO NOT COVER CONSTRUCTION OF THESE AREAS. LOCATION OF THESE FEATURES MAY VARY DEPENDING ON FINAL CONSTRUCTION PLANS BUT MAY NOT INFRINGE ON THE DRAINFIELD AREA.
10. DRAINFIELD DENUDED AREA = 0.54 AC
11. CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE ON PUMP LINE FROM PUMP TANK TO DISTRIBUTION BOX.



FLOW DIVIDER DETAIL
NTS



DISTRIBUTION BOX #1 – DRAINFIELD #1

12 TOTAL TAPS – 1/2" SCH. 80 PVC (TAPS)
6" SCH. 80 PVC MANIFOLD
FLOW REQUIREMENT = 66 GPM AT 2 FT OF HEAD
TOTAL LINE LENGTH = 1296 L.F.

LAKE MIST DRIVE

25' SETBACK

RESERVE FIELD AREA

10 LINES AT 108 L.F. EACH
1080 L.F. TOTAL

22

800

700

600

500

400

790

RED
WHITE
ORANGE
BLUE
YELLOW

795.15
797.30
798.05
799.0
799.80
800.90
801.60
802.60
803.70
804.45

108'

BAY PORT LANE

VE FIELD AREA

AT 108 L.F. EACH
TOTAL

SCH. 40 SUPPLY LINE
STRIBUTION BOX #1

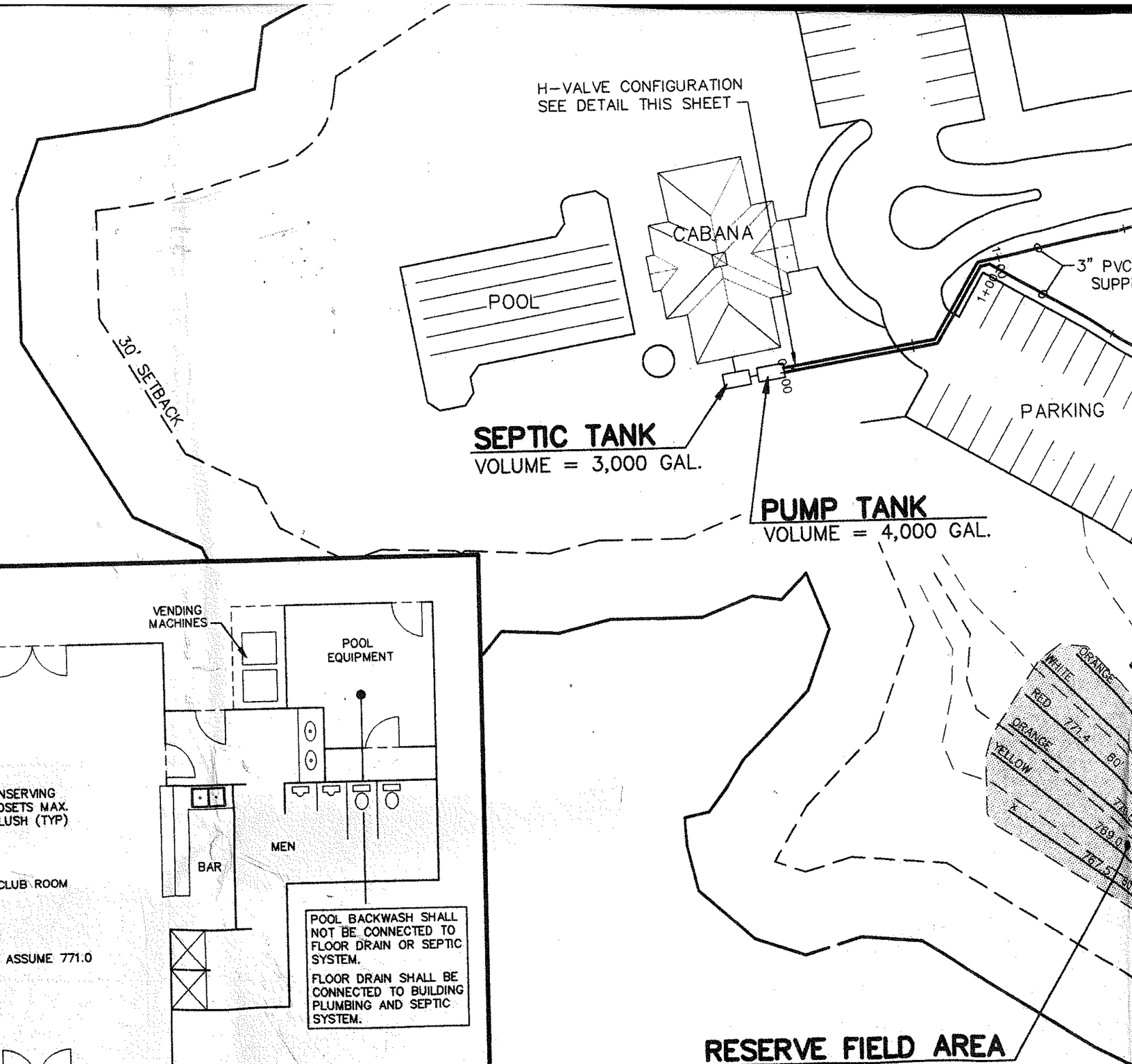
35' SETBACK

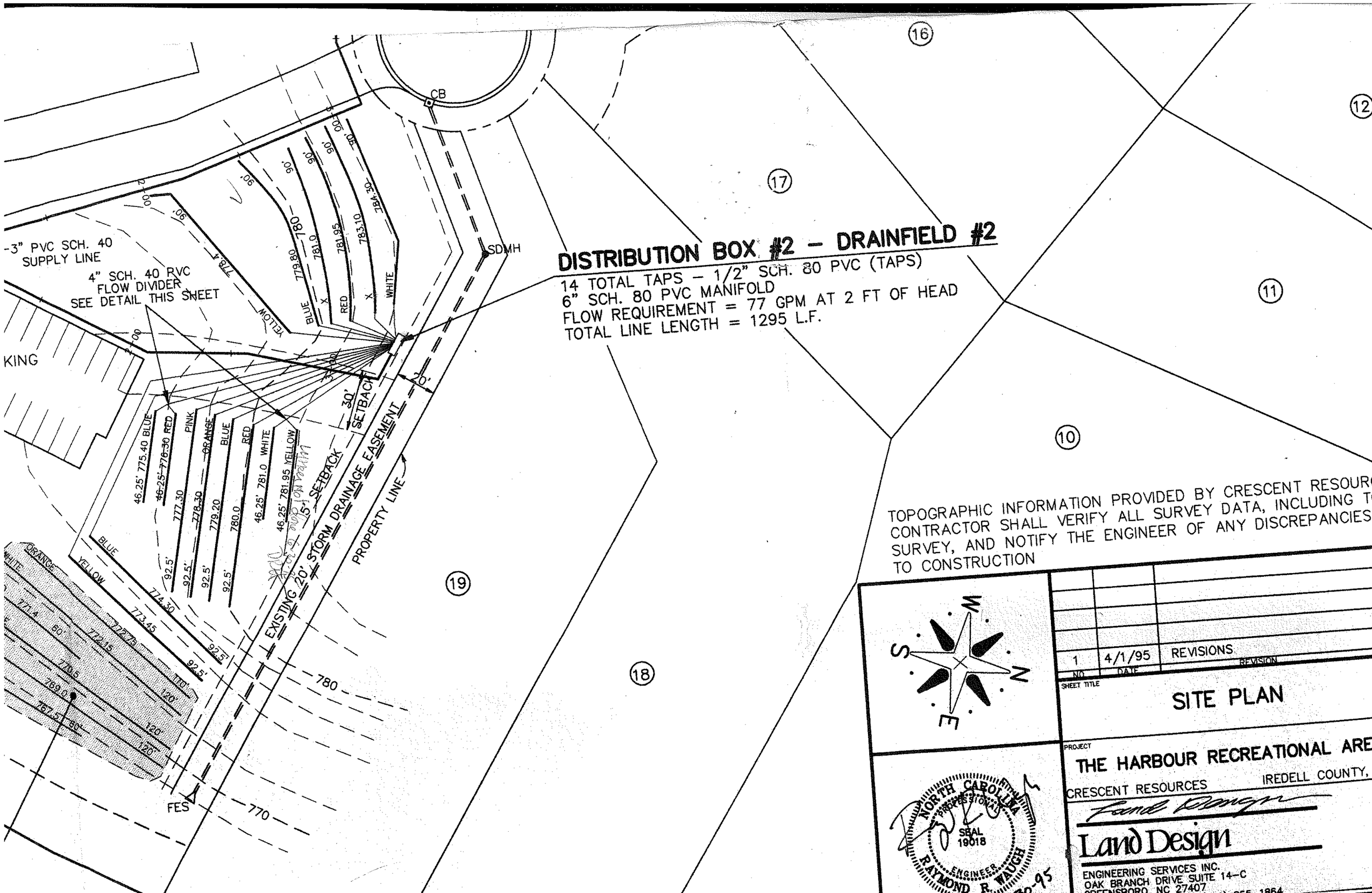
14

RESERVE FIELD AREA

5 LINES AT 108 L.F. EACH

LAKE NORMAN


H-VALVE CONFIGURATION
SEE DETAIL THIS SHEET
CABANA
POOL
30' SETBACK
SEPTIC TANK
VOLUME = 3,000 GAL.
PUMP TANK
VOLUME = 4,000 GAL.
PARKING
3" PVC
SUPP
1+00
2+00
SINKS WITH AUTO. SHUT-OFF FAUCETS SPRING LOADED MAX. 10 GPD (TYP)
VENDING MACHINES
OFFICE
POOL EQUIPMENT
3,000 GAL SEPTIC TANK
STORAGE
PUMP CONTROLS
WATER CONSERVING WATER CLOSETS MAX. 1.5 GAL/FLUSH (TYP)
WOMEN
CLUB ROOM
BAR
MEN
4,000 GAL PUMP TANK
FFE ASSUME 771.0
POOL BACKWASH SHALL NOT BE CONNECTED TO FLOOR DRAIN OR SEPTIC SYSTEM.
FLOOR DRAIN SHALL BE CONNECTED TO BUILDING PLUMBING AND SEPTIC SYSTEM.
3" GATE VALVES
3" PVC SCH. 40 FORCE MAIN TO DRAINFIELDS
ORANGE
WHITE
RED
771.4
ORANGE
YELLOW
RESERVE FIELD AREA
620 L.F. TOTAL LINE LENGTH



DISTRIBUTION BOX #2 – DRAINFIELD #2

14 TOTAL TAPS – 1/2" SCH. 80 PVC (TAPS)
6" SCH. 80 PVC MANIFOLD
FLOW REQUIREMENT = 77 GPM AT 2 FT OF HEAD
TOTAL LINE LENGTH = 1295 L.F.

TOPOGRAPHIC INFORMATION PROVIDED BY CRESCENT RESOURC
CONTRACTOR SHALL VERIFY ALL SURVEY DATA, INCLUDING TO
SURVEY, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES
TO CONSTRUCTION

NO	DATE	REVISION
1	4/1/95	REVISIONS

SHEET TITLE

SITE PLAN

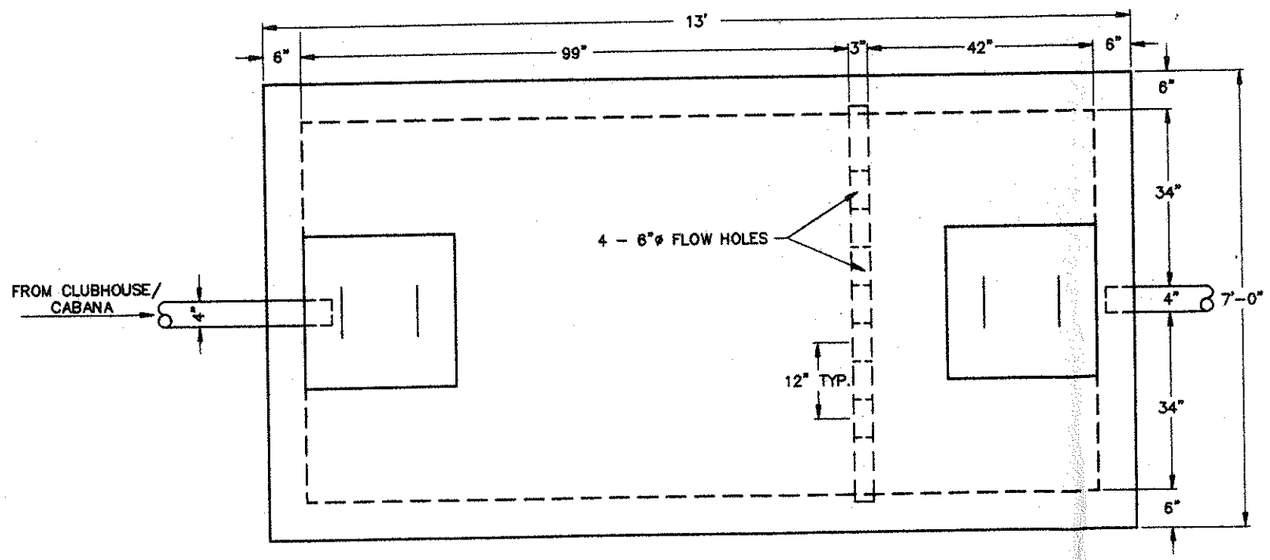
PROJECT

THE HARBOUR RECREATIONAL AREA

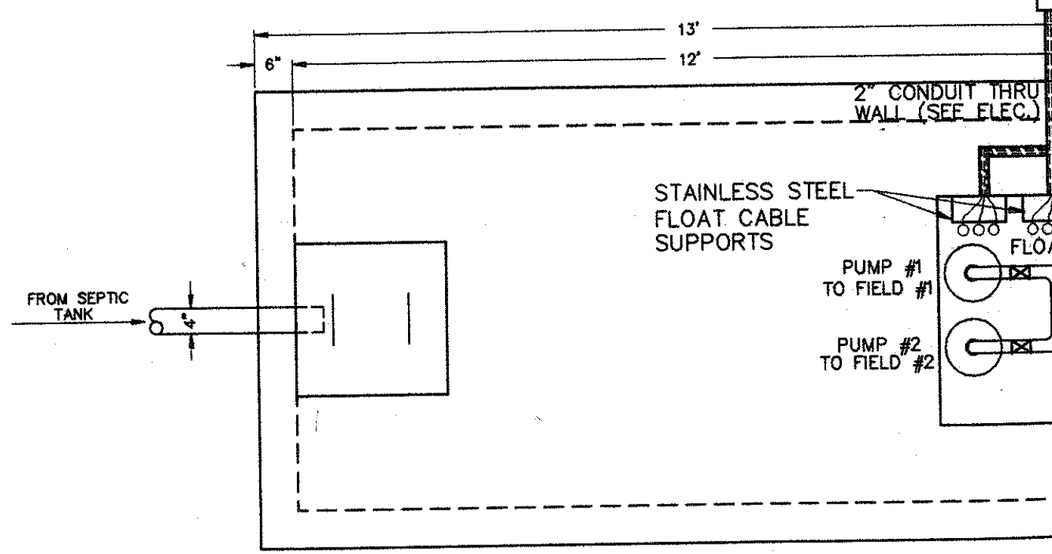
CRESCENT RESOURCES IREDELL COUNTY,

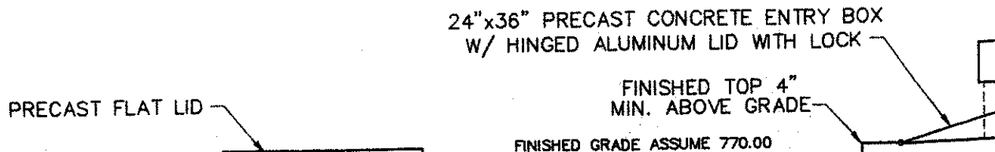
NORTH CAROLINA PROFESSIONAL SEAL 19018 ENGINEER RAYMOND R. VAUGH 4-20-95

Land Design
ENGINEERING SERVICES INC.
OAK BRANCH DRIVE SUITE 14-C
GREENSBORO, NC 27407


13'
6"
99"
3"
42"
6"
6"
34"
4" 7'-0"
34"
6"
4 – 6"ø FLOW HOLES
12" TYP.
FROM CLUBHOUSE/
CABANA

PLAN VIEW


13'
12'
6"
2" CONDUIT THRU
WALL (SEE ELEC.)
STAINLESS STEEL
FLOAT CABLE
SUPPORTS
PUMP #1
TO FIELD #1
PUMP #2
TO FIELD #2
FROM SEPTIC
TANK


24"x36" PRECAST CONCRETE ENTRY BOX
W/ HINGED ALUMINUM LID WITH LOCK
FINISHED TOP 4"
MIN. ABOVE GRADE
PRECAST FLAT LID
FINISHED GRADE ASSUME 770.00

D
PANEL

N BOX

3"x3"x3" TEE
2"x3" BUSHING EA. END (LINES FROM PUMP) 3" SCH 40 PVC LINE TO DISTRIBUTION BOXES

7'

D JUNCTION BOX
OWER & FLOAT WIRING

3" SCH. 40 PVC PRESSURE LINE TO DRAINFIELD #1

3" SCH. 40 PVC PRESSURE LINE TO DRAINFIELD #2

3" GATE VALVE NORMALLY OPEN

3" GATE VALVE NORMALLY CLOSED

3" GATE VALVE NORMALLY OPEN

JUNCTION BOX

PUMP CONTROLS

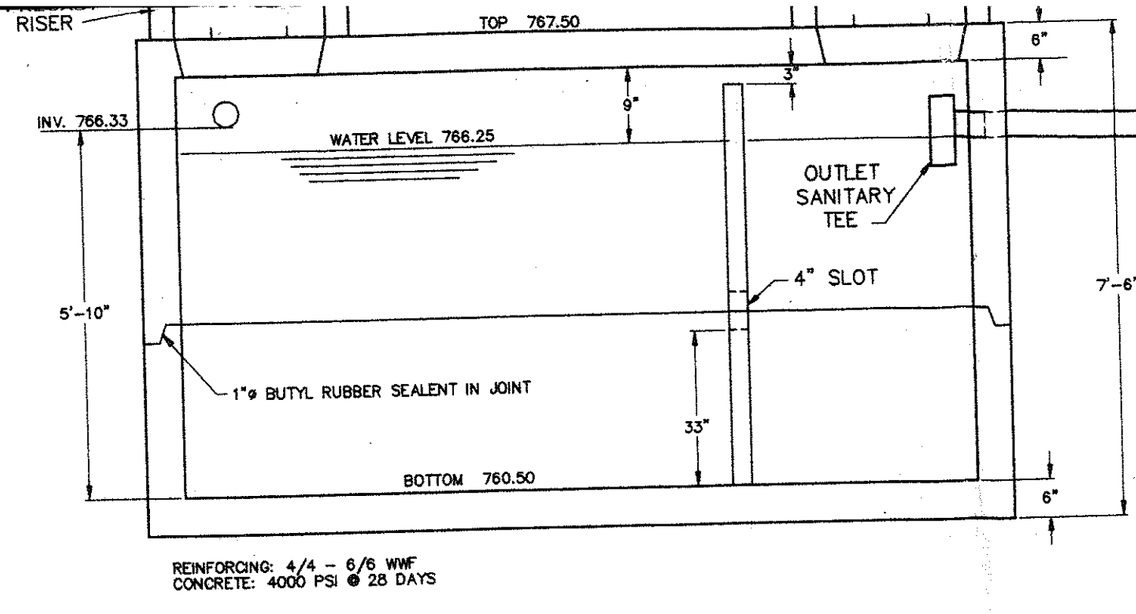
STORAGE

PUMP TANK 4,000 GAL

4" SCH. 40 PVC

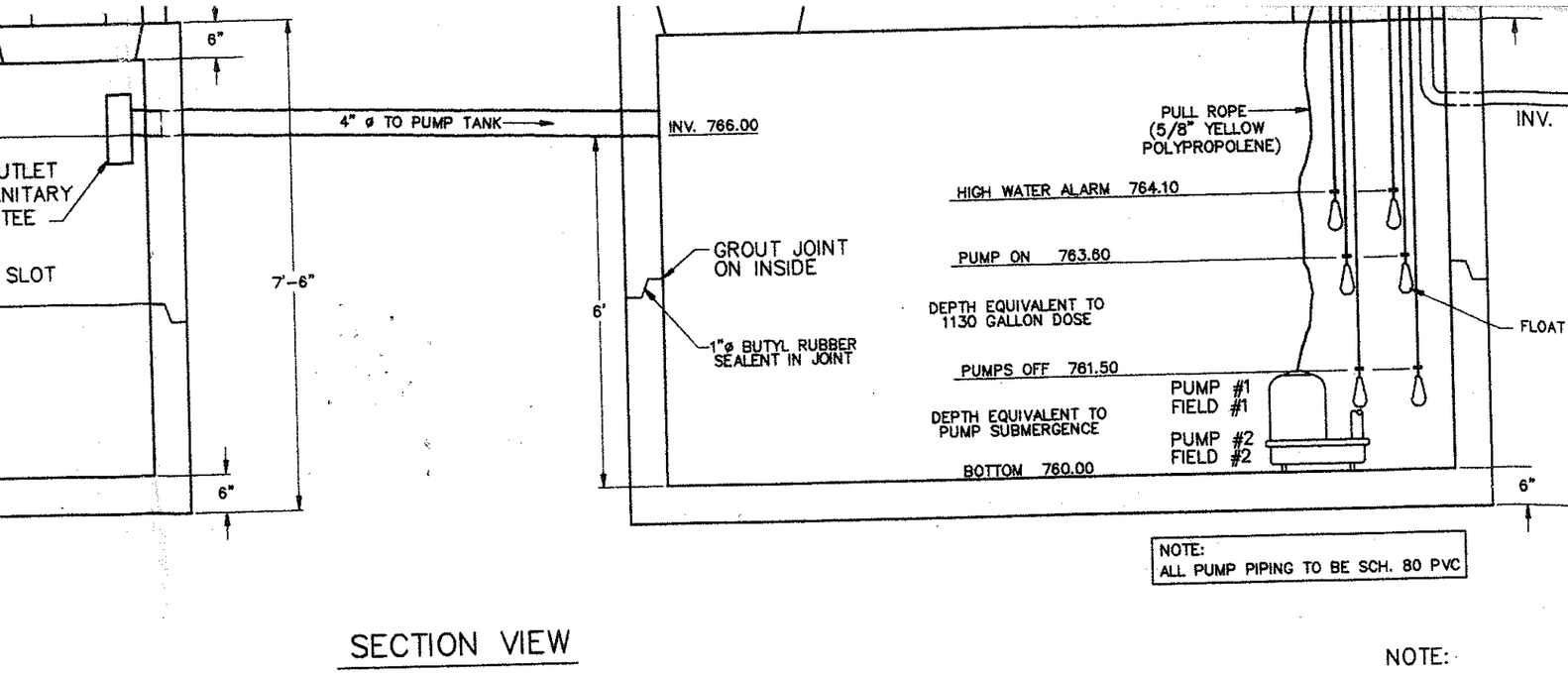
5' MIN.

SEPTIC TANK 3,000 GAL



3,000 GALLON CAPACITY SEPTIC TANK

NTS



SECTION VIEW

NOTE:

SEPARATE FLO
EACH PUMP.
BE 1130 GALL
AS ORIGINALL

DOUBLE FLOA
FOR POTENTIA
DOSING DURIN

4,000 GALLON CAPACITY PUMP TANK

NTS

3" PVC SCH. 40
PRESSURE LINE TO
DRAINFIELDS

TO CONTROL
DESIGN WILL
I FIELD

LL ALLOW
D FIELD
ELD OPERATION.

CONNECTION BY
BUILDING PLUMBER

LAYOUT PLAN

SCALE: 1"=5'

NOTE: PUMP CONTROLS TO BE MOUNTED AT EYE LEVEL ON EXTERIOR WALL OF POOL CLUBHOUSE SEE SPECIFICATIONS FOR CONTROL PANEL DETAIL

NO	DATE	REVISION	BY
1	4/1/95	REVISIONS	SMB

SHEET TITLE: SEPTIC TANK & PUMP TANK DETAILS

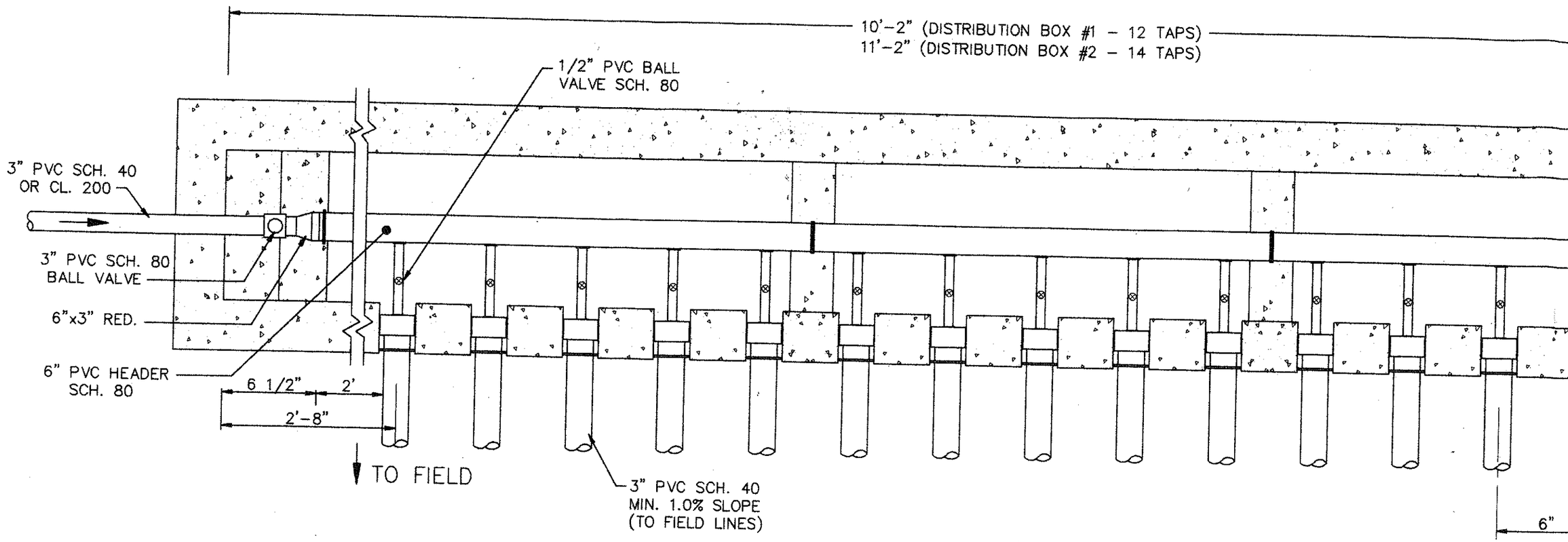
PROJECT: THE HARBOUR RECREATIONAL AREA
CRESCENT RESOURCES IREDELL COUNTY, N.C.

NORTH CAROLINA PROFESSIONAL SEAL 19018 ENGINEER RAYMOND R. WAUGH
3-30-95

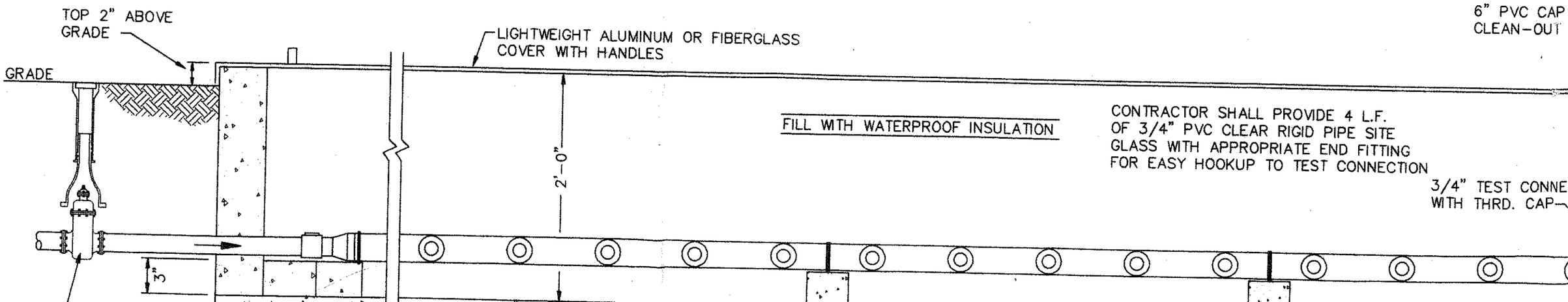
Land Design
ENGINEERING SERVICES INC.
OAK BRANCH DRIVE SUITE 14-C
GREENSBORO, NC 27407
(910) 855-5785 FAX:(910) 855-1864

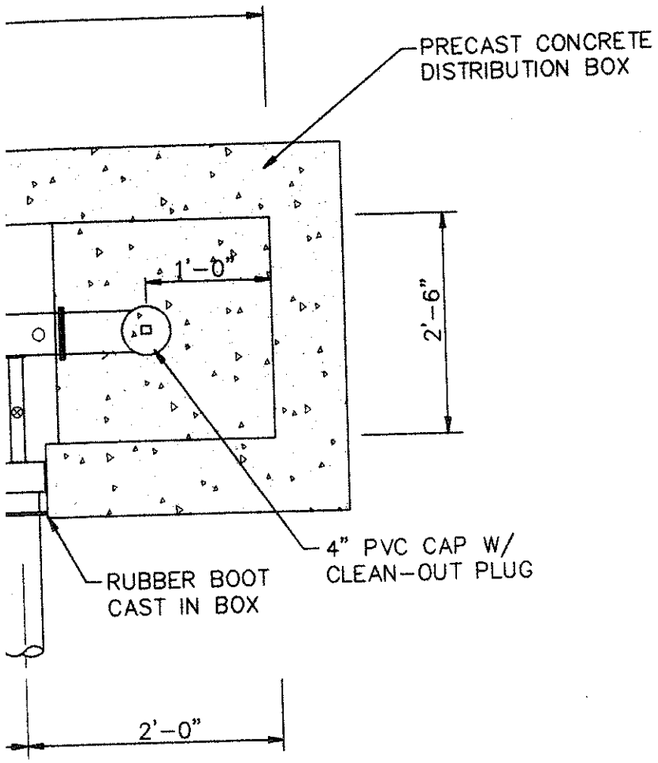
PROJECT NO. 75100
SCALE AS NOTED
DATE MARCH 1995
DRAWN BY SMB
CHECKED BY RRW
FILE NAME DWG\HARBOUR\SPDETAIL.DW
DRAWING NO.

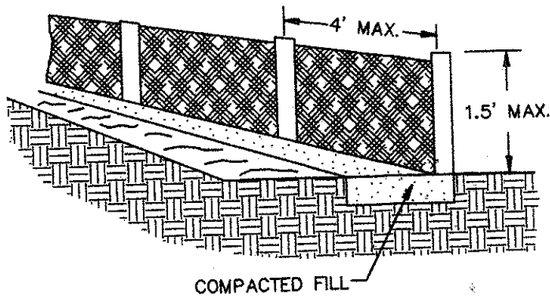
3 OF 5 SHTS


10'-2" (DISTRIBUTION BOX #1 - 12 TAPS)
11'-2" (DISTRIBUTION BOX #2 - 14 TAPS)
1/2" PVC BALL VALVE SCH. 80
3" PVC SCH. 40 OR CL. 200
3" PVC SCH. 80 BALL VALVE
6"x3" RED.
6" PVC HEADER SCH. 80
6 1/2"
2'
2'-8"
TO FIELD
3" PVC SCH. 40 MIN. 1.0% SLOPE (TO FIELD LINES)
6"

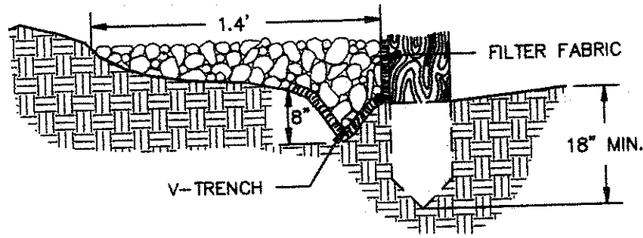
PLAN


TOP 2" ABOVE GRADE
GRADE
LIGHTWEIGHT ALUMINUM OR FIBERGLASS COVER WITH HANDLES
2'-0"
FILL WITH WATERPROOF INSULATION
CONTRACTOR SHALL PROVIDE 4 L.F. OF 3/4" PVC CLEAR RIGID PIPE SITE GLASS WITH APPROPRIATE END FITTING FOR EASY HOOKUP TO TEST CONNECTION
6" PVC CAP CLEAN-OUT
3/4" TEST CONNE WITH THRD. CAP
3"





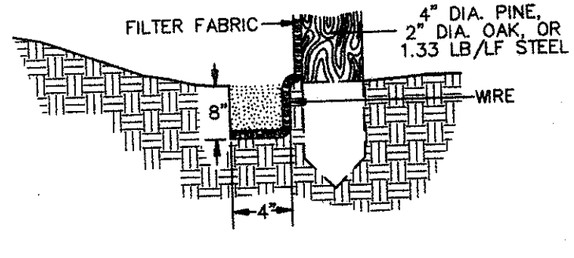
BACKFILL MIN. 8" THICK
LAYER OF GRAVEL



MAXIMUM SLOPE LENGTH AND
SLOPE FOR WHICH SEDIMENT
FENCE IS APPLICABLE

SLOPE	SLOPE LENGTH (ft.)
<2%	100
2 TO 5%	75
5 TO 10%	50
10 TO 20%	25
>20%	15

EXTENSION OF FABRIC AND
WIRE INTO THE TRENCH



SPECIFICATIONS FOR
SEDIMENT FENCE FABRIC

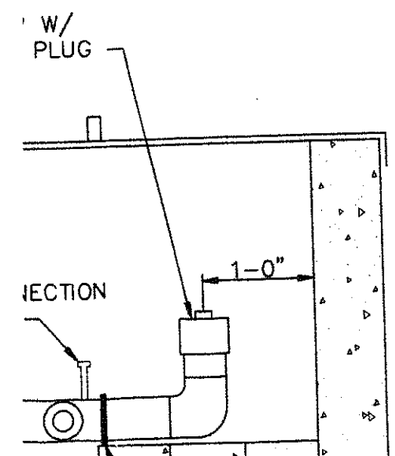
PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	85% (MIN.)
TENSILE STRENGTH AT 20% (MAX.) ELONGATION	STANDARD STRENGTH– 30 LB./LIN. INCH (MIN.)
	EXTRA STRENGTH– 50 LB./LIN.IN (MIN.)
SLURRY FLOW RATE	0.3 GAL/SQ. FT/MIN (MIN.)

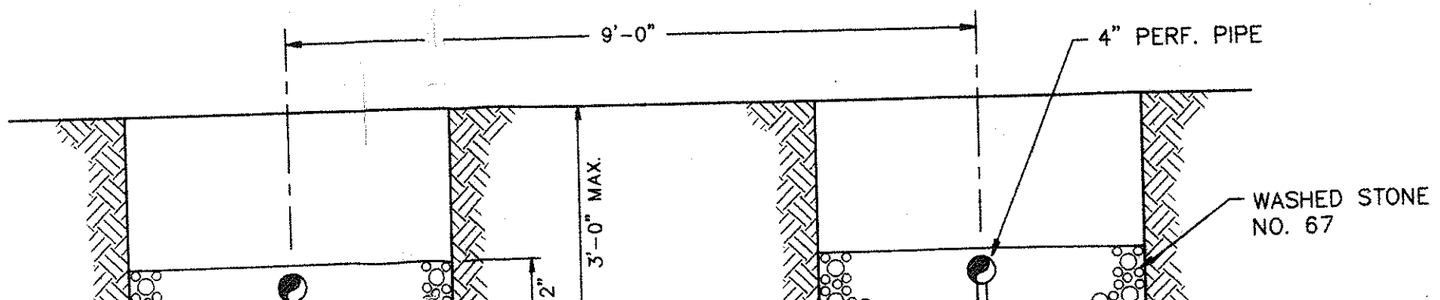
GENERAL NOTES:

1. DRAINAGE AREA SHALL BE LESS THAN 1/4 ACRE PER 100 FEET OF FENCE.
2. DEPTH OF WATER BEHIND FENCE SHALL NOT EXCEED 1.5 FEET.
3. FOR REINFORCEMENT OF FABRIC, USE 14 GAUGE MESH WITH 6" SPACING.
4. CONSTRUCT FENCE FROM A CONTINUOUS ROLL. JOINTS SHALL OVERLAP BY 4' MINIMUM.
5. IF WIRE MESH IS USED, FENCE POST SPACING MAY BE 8' MAXIMUM.
6. DO NOT ATTACH FABRIC TO EXISTING TREES.
7. INSPECT FENCES WEEKLY AND AFTER RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY.
8. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO ENSURE ADEQUATE STORAGE VOLUMES.

SILT FENCE

N.T.S.





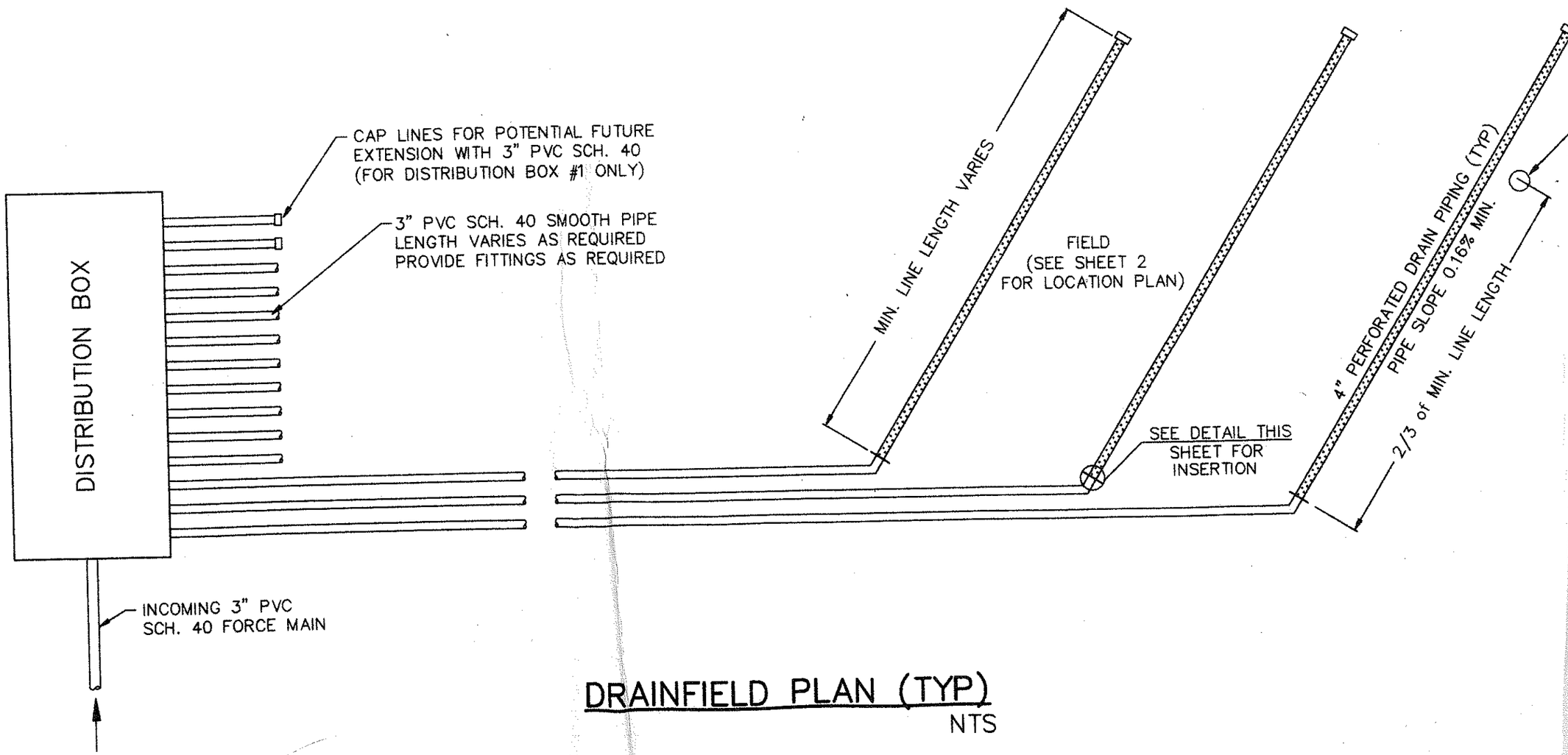
THREADED IRON GATE VALVE
W/SCH. 80 THREADED TO
SOLVENT WELD ADAPTERS

SECTION

NOTE:
DIMENSIONS OF DISTRIBUTION BOX MAY VARY DEPENDING ON MANUFACTURER. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW. BUILT IN PLACE MASONRY BOX SHALL ALSO BE ACCEPTABLE.

DISTRIBUTION BOXES #1 & #2 (TYP)

(SEE SITE PLAN FOR BOX ORIENTATION) NTS



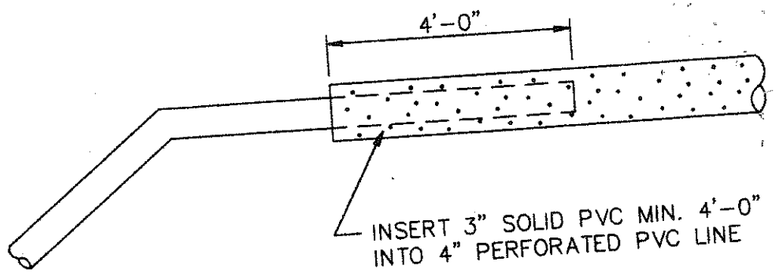
DRAINFIELD PLAN (TYP)

NTS

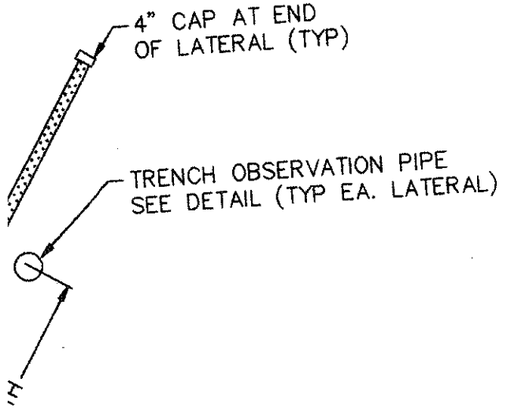
W/ STAINLESS STEEL TIE DOWN STRAPS

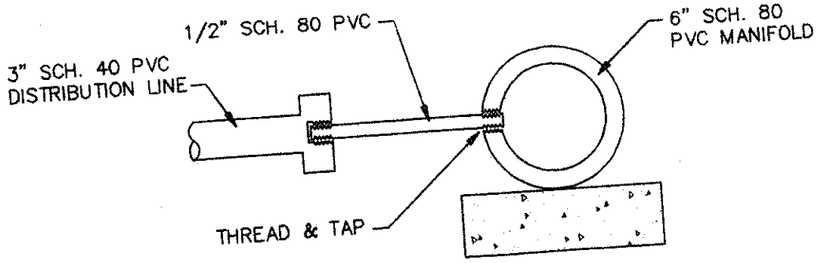
HALL

ABLE.



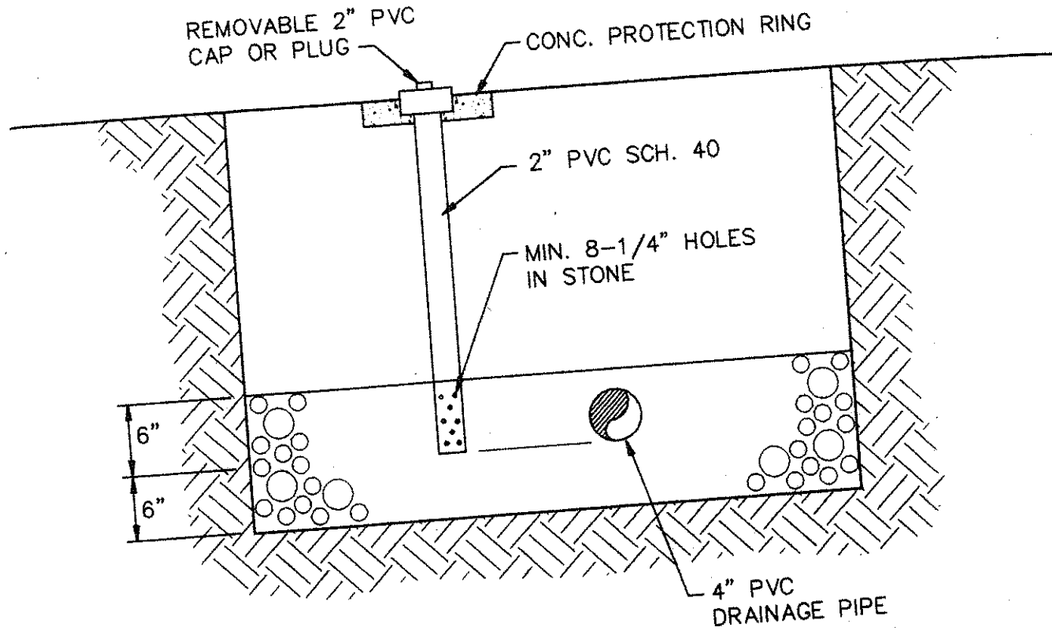
PIPE INSERTION DETAIL
NTS





MANIFOLD TAP DETAIL
NTS

DRAINFIELD SECTION
NTS



TRENCH OBSERVATION PIPE DETAIL
NTS

NO	DATE	REVISION
1	4/1/95	REVISIONS

SHEET TITLE

DRAINFIELD DETAILS

PROJECT

THE HARBOUR RECREATIONAL AREA

CRESCENT RESOURCES IREDELL COUNTY, N.C.

NORTH CAROLINA PROFESSIONAL SEAL 19018 ENGINEER RAYMOND R. WAUGH 3-30-95

Land Design

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