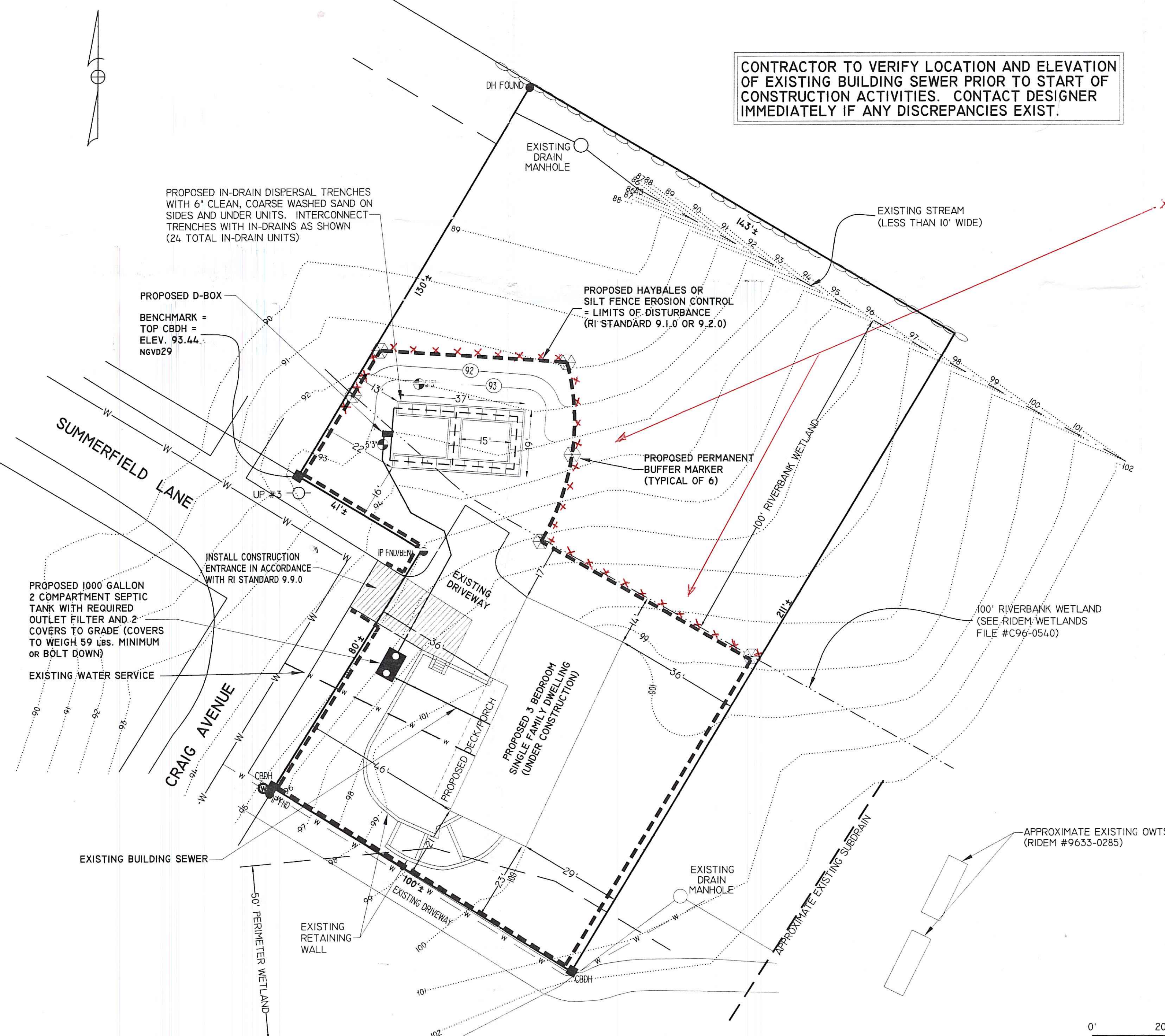


CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING BUILDING SEWER PRIOR TO START OF CONSTRUCTION ACTIVITIES. CONTACT DESIGNER IMMEDIATELY IF ANY DISCREPANCIES EXIST.

REVISED PER DEM:  
X- PLANT RHODODENDRON SHOUBS (RHODODENDRON MAXILLIMA)  
16 FEET ON CENTER AND 3 FEET HIGH AFTER PLANTING

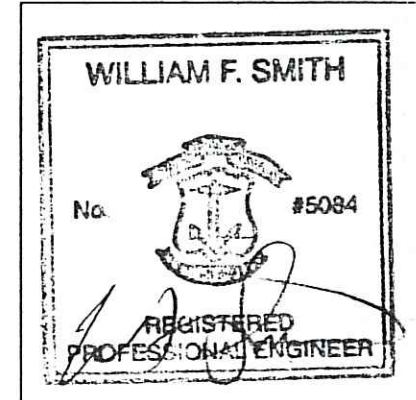


- LEGEND**
- 100' EXISTING CONTOUR
  - 100' PROPOSED CONTOUR
  - STONE WALL
  - EXISTING STREAM
  - 100' RIVERBANK WETLAND
  - 50' PERIMETER WETLAND
  - EXISTING WATER LINE
  - PROPOSED HAYBALE/SILT FENCE
  - CONCRETE BOUND WITH DRILL HOLE
  - MONUMENT FOUND
  - UTILITY POLE
  - WATER GATE
  - IP IRON PIPE
  - CBDH CONCRETE BOUND WITH DRILL HOLE
  - GROUND WATERTABLE TEST LOCATION
  - PROPOSED PERMANENT BUFFER MARKER

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OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED NOV - 4 2010 FILE # 10-0194  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Cooney*

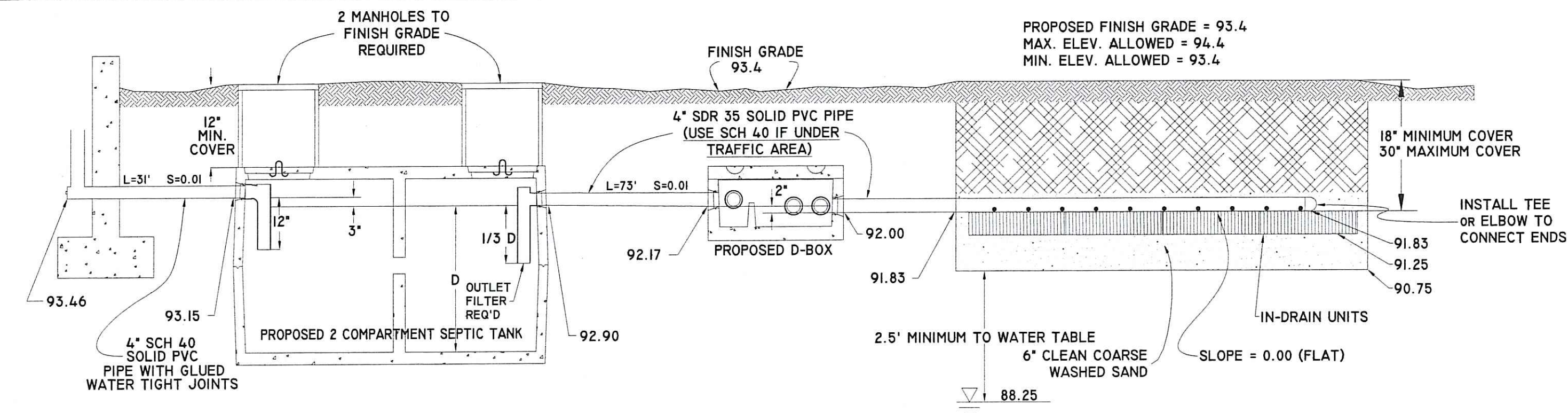


PROPOSED OWTS NEW CONSTRUCTION PLAN  
PREPARED FOR  
**COLLEEN STANTON**  
MAP 1-14 BLOCK 40 LOT 54  
CRAIG AVENUE & SUMMERFIELD LANE  
TIVERTON, RHODE ISLAND

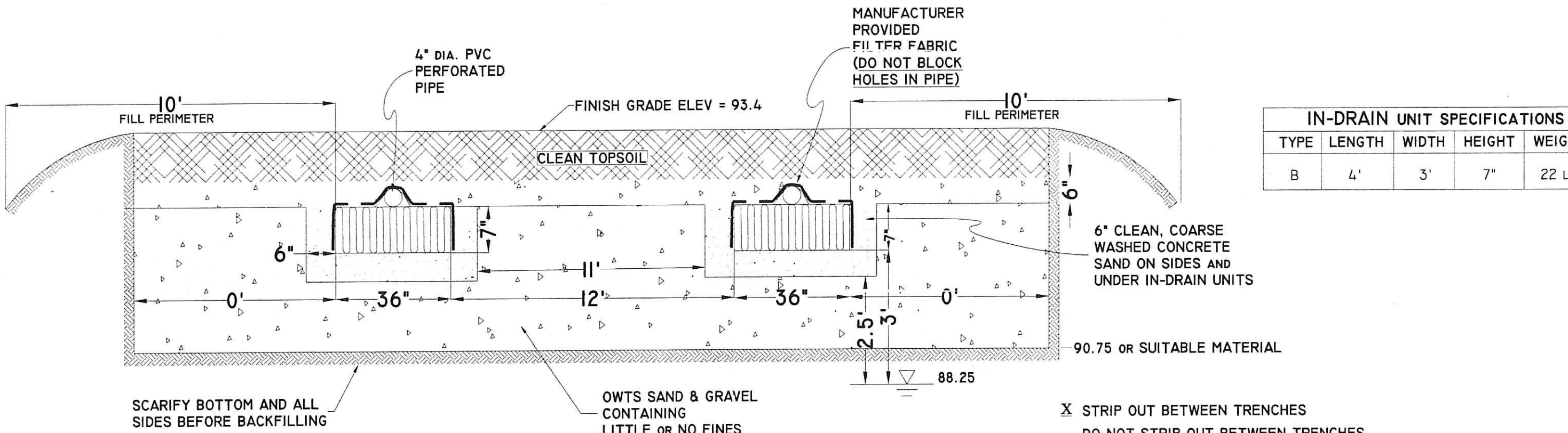
SCALE: 1" = 20' DATE: AUGUST 23, 2007

Civil Engineering Concepts, Inc.  
34A MAIN STREET P.O. BOX 5323  
LITTLE COMPTON, RI 02837 NEW BEDFORD, MA 02742  
PH: (401) 592-0177 (508) 990-4900  
FAX: (401) 592-0178 EMAIL: wsmithce@aol.com

REVISIONS: SHEET 1 OF 2 JOB#: 07-095



**SYSTEM PROFILE**  
NOT TO SCALE



**TYPICAL IN-DRAIN SECTION**  
NOT TO SCALE

IN-DRAIN UNIT SPECIFICATIONS				
TYPE	LENGTH	WIDTH	HEIGHT	WEIGHT
B	4'	3'	7"	22 LBS.

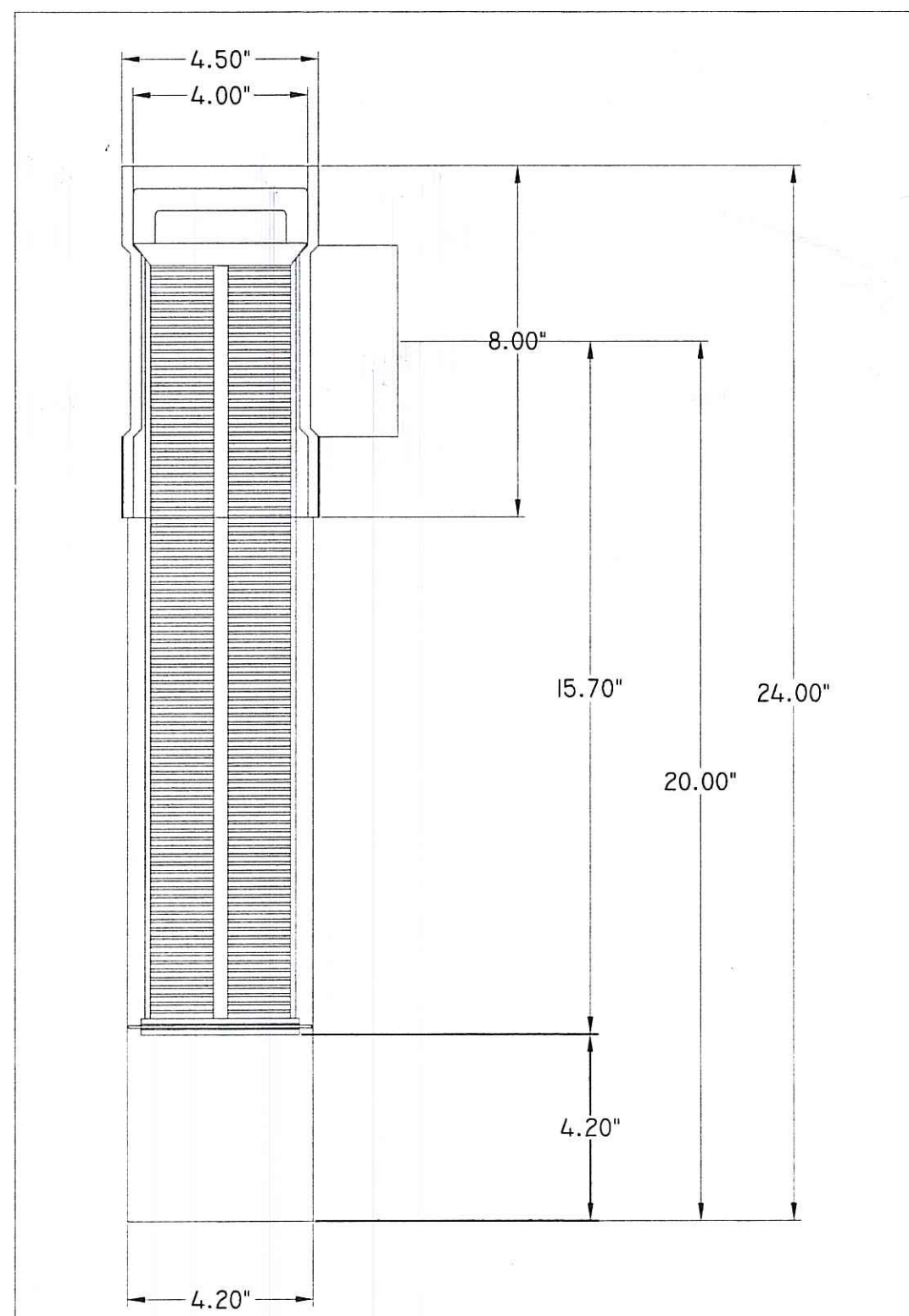
**BASIS OF SANITARY DESIGN**  
 NUMBER OF BEDROOMS: 3  
 GARBAGE GRINDER: NOT ALLOWED  
 ESTIMATED SEWAGE FLOW: 34.5 GALLONS PER DAY  
 SIZE OF SEPTIC TANK: 1000 GALLONS  
 DESIGN PERCOLATION RATE: 15 MIN/INCH  
 LEACHING AREA PROVIDED: 2 IN-DRAIN LEACHING TRENCHES AT 37' LONG  
 4" WIDE w/ 6" COARSE WASHED SAND ON SIDES & UNDER UNITS  
 = 672 SF (24 UNITS TOTAL) (566 SF REQUIRED)  
 SYSTEM CAPACITY: 672 SF x 0.61 GALLONS/SF/DAY  
 = 409 GALLONS PER DAY

FINISHED FIRST FLOOR.....	EXISTING
TOP OF FOUNDATION.....	104.63
FINISHED GARAGE FLOOR.....	98.54
FINISHED BASEMENT FLOOR.....	95.68
INVERT AT DWELLING.....	93.46 (CONTRACTOR TO CONFIRM)
INVERT INTO SEPTIC TANK.....	93.15 (CONTRACTOR TO CONFIRM)
INVERT OUT OF SEPTIC TANK.....	92.90
INVERT INTO D-BOX.....	92.17
INVERT OUT OF D-BOX.....	92.00
INVERT AT BEGINNING OF TRENCH.....	91.83
INVERT AT END OF TRENCH.....	91.83
BOTTOM OF IN-DRAIN.....	91.25
BOTTOM OF COARSE SAND.....	90.75
BOTTOM OF OWTS SAND & GRAVEL.....	88.75
ELEVATION OF WATER TABLE.....	88.25
EXISTING AVERAGE GRADE AT OWTS.....	93.5

\*\*\*NOTE: ELEVATIONS ARE BASED ON CONVENTIONAL DWELLING. NOTIFY DESIGNER OF ANY DISCREPANCIES PRIOR TO ANY WORK. DESIGN DOES NOT PERMIT TOILETS IN BASEMENT AREA.

NO EXISTING OR PROPOSED WELLS WERE OBSERVED WITHIN 200' OF PROPOSED OWTS.  
 NO EXISTING OR PROPOSED PUBLIC WELLS WERE OBSERVED WITHIN 500' OF PROPOSED OWTS.  
 SITE IS SERVICED BY TOWN WATER.  
 MAINTAIN ELEVATION 91.83 WITHIN 10' OF PROPOSED OWTS.  
 NO UPGRADIENT DRAINS ALLOWED WITHIN 25' OF PROPOSED OWTS.  
 NO DOWNGRADIENT DRAINS ALLOWED WITHIN 50' OF PROPOSED OWTS.  
 BRING SEPTIC TANK COVERS TO GRADE. COVER TO BE 18" MIN AND CAPABLE OF WITHSTANDING H-20 LOADING. COVERS TO WEIGH 59 LBS. MINIMUM OR BOLT DOWN.  
 ALL OWTS PIPE TO BE 4" DIAMETER, PVC SDR 35 (MIN) PERFORATED OR SOLID AS REQUIRED.  
 UTILIZE SCH 40 (MINIMUM) SOLID PVC PIPE UNDER TRAFFIC AREAS, AS NECESSARY.  
 OUTLET FILTER TO BE INSPECTED SEMI-ANNUALLY TO ENSURE PROPER FUNCTIONING.  
 BUILDING SEWER TO BE 4" SCH 40 PVC WITH GLUED, WATERTIGHT JOINTS.

- NOTES:**
- 1.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT- RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS MOST RECENTLY AMENDED.
  - 2.) ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER WITH LINES LAID AS STRAIGHT AS POSSIBLE AND JOINTS MADE WATERTIGHT. ALL WORK TO BE DONE BY AN INSTALLER LICENSED IN THE STATE OF RHODE ISLAND.
  - 3.) SEPTIC TANK TO BE JOLLEY PRECAST 1000 GALLON TWO COMPARTMENT SEPTIC TANK. TWO SEPTIC TANK COVERS TO BE BROUGHT TO FINISH GRADE. OUTLET FILTER REQUIRED.
  - 4.) DISTRIBUTION BOX TO BE JOLLEY PRECAST 7-I D-BOX OR APPROVED EQUALS. ALL DISTRIBUTION LINES FROM BOX ONE FOOT INTO START OF TRENCH TO BE MINIMUM SOLID SDR-35. A DROP OF 2" IS REQUIRED FROM THE D-BOX TO THE START OF THE TRENCHES. BAFFLES OR INLET TEE REQUIRED IN D-BOX.
  - 5.) LEACHING AREA EXCAVATION SHALL BE LEVEL AND SCARIFIED. CARE SHALL BE TAKEN TO AVOID COMPACTION OF THE LEACHING AREA. EXCAVATION SHALL BE STRIPPED OF ALL BRUSH, TREES, TOPSOIL, SUBSOIL AND OTHER UNDESIRABLE MATERIAL AND BACKFILLED WITH CLEAN COARSE SAND, GRAVEL OR STONE, AS DESIGNATED ON THE PLAN. SAND AND GRAVEL TO HAVE A MINIMUM PERCOLATION RATE OF 5 MIN/INCH. MAX STONE SIZE IS 6". LIMIT 10% OF 2" - 6" STONES.
  - 6.) ALL BACKFILL MATERIAL PLACED OVER THE SEPTIC SYSTEM SHALL BE FREE OF LARGE STONES, RUBBISH, OR OTHER DELETERIOUS MATERIALS. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO RUN OVER THE LEACHING AREA.
  - 7.) THE SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE GRINDER, WATER SOFTENER, OR JACUZZI.
  - 8.) FOR PROPER OPERATION, THE SEPTIC TANK SHALL BE INSPECTED ANNUALLY AND PUMPED AT NO GREATER THAN 2 YEAR INTERVALS. OUTLET FILTER TO BE INSPECTED AND CLEANED SEMI-ANNUALLY.
  - 9.) NO PARKING IS PERMITTED IN THE VICINITY OF THE OWTS.
  - 10.) DIG SAFE NOTIFICATION IS REQUIRED PRIOR TO ANY EXCAVATION.
  - 11.) CONTRACTOR TO INSTALL 12" MINIMUM COVER OVER OWTS. CONTRACTOR IS TO INSURE 6" LOAM AND SEED OVER ALL DISTURBED AREAS UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE FOR FINISH LANDSCAPING.
  - 12.) PROPERTY LINES AS DEPICTED ON THIS PLAN THE RESULT OF A BOUNDARY SURVEY. NOT THE RESULT OF A BOUNDARY SURVEY.
  - 13.) CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SAFETY AND BUILDING CODES ARE FOLLOWED.
  - 14.) DESIGNER TO BE NOTIFIED 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF OWTS CONSTRUCTION. CONTRACTOR IS TO INSURE THAT DESIGNER IS NOTIFIED 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS SO PROPER NOTIFICATION TO RIDEM CAN BE MADE. FAILURE TO PROVIDE ADVANCE NOTICE WILL RESULT IN DELAYS TO THE CONTRACTOR. WORK SHALL NOT CONTINUE UNTIL VARIOUS STAGE IS APPROVED.
  - 15.) AT THE TIME CONSTRUCTION STARTED ON THIS DWELLING THERE WAS AN AGREEMENT WITH THE NEIGHBORS ON SUMMERFIELD LANE TO SHARE THE COST TO EXTEND THE SEWER LINE. THIS AGREEMENT HAS RECENTLY FALLEN APART AND IT IS NOW NECESSARY TO REVERT TO THE ORIGINAL APPROACH TO UTILIZE AN OWTS FOR THE SITE.
  - 16.) REFER TO RIDEM WETLANDS PERMIT FOR ADDITIONAL CONDITIONS, NOTIFICATION TO RIDEM, POSTING OF FILE # SIGN, & INSTALLATION OF REQUIRED BUFFER MARKERS REQUIRED PRIOR TO COMMENCEMENT OF OWTS INSTALLATION.



**SEPTIC TANK OUTLET FILTER**

**ZABEL ENVIRONMENTAL TECHNOLOGY**  
 10109 WATKINSON TRAIL, JEFFERSON TOWN, KY 40309

TITLE: A1800 STANDARD FILTER

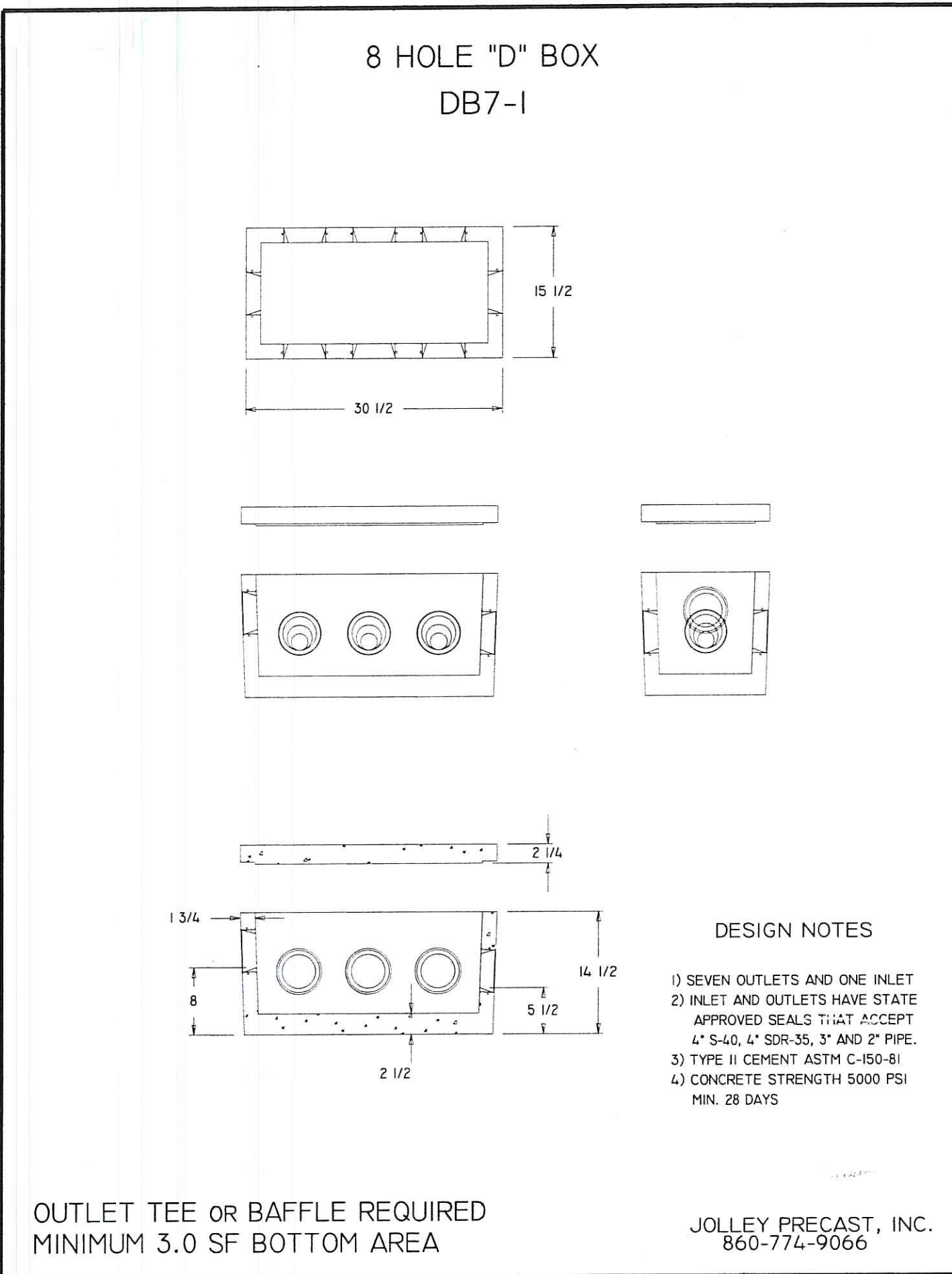
SIZE: A    DWG NO.: A1800    REV:   

SCALE:    DRAWN: JCC    DATE: 09/29/08

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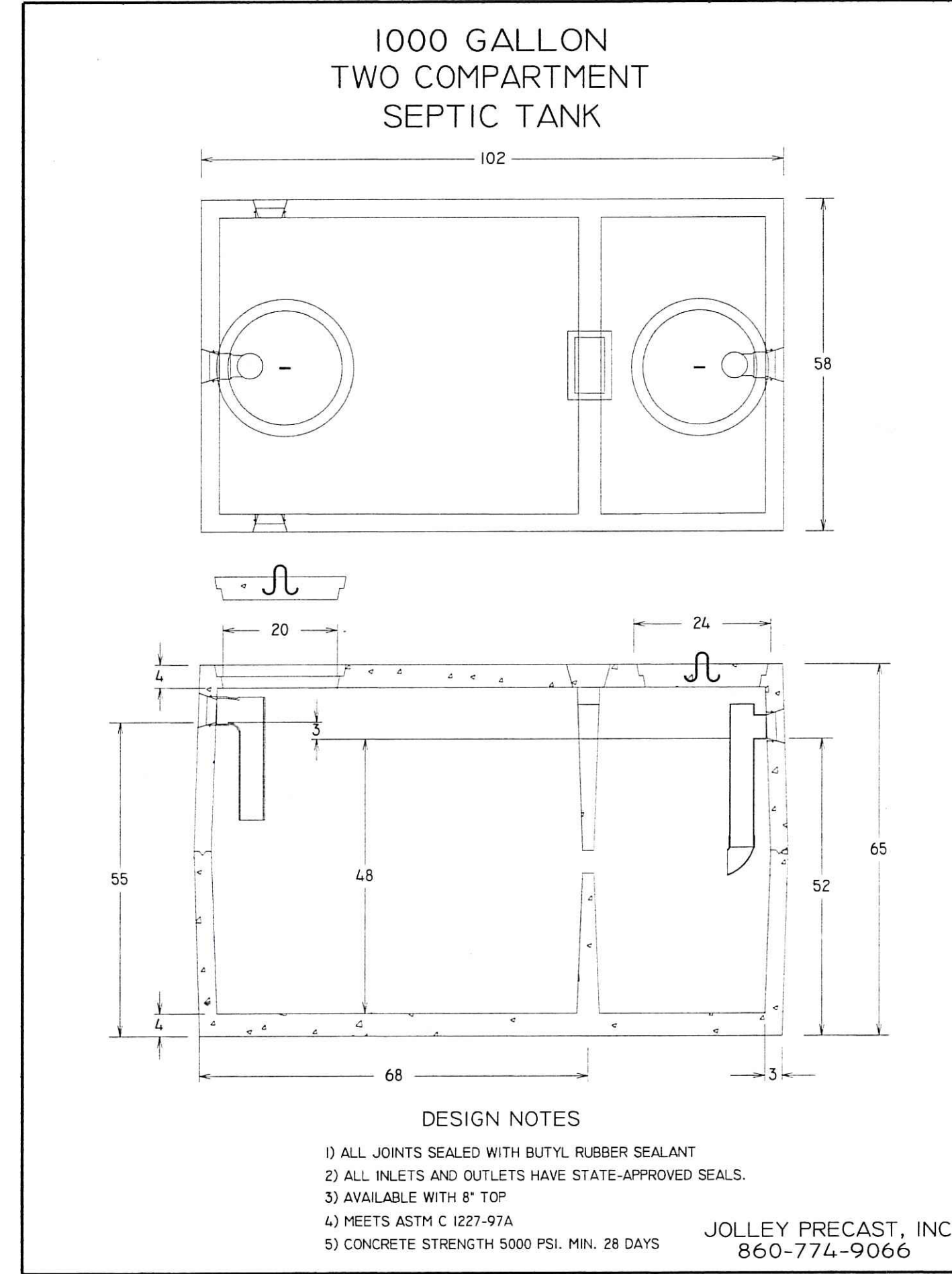
*W. Joseph Casey*



**DESIGN NOTES**

- 1) SEVEN OUTLETS AND ONE INLET
- 2) INLET AND OUTLETS HAVE STATE APPROVED SEALS THAT ACCEPT 4" S-40, 4" SDR-35, 3" AND 2" PIPE.
- 3) TYPE II CEMENT ASTM C-150-81
- 4) CONCRETE STRENGTH 5000 PSI MIN. 28 DAYS

JOLLEY PRECAST, INC.  
 860-774-9066



**DESIGN NOTES**

- 1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
- 2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS.
- 3) AVAILABLE WITH 8" TOP
- 4) MEETS ASTM C 1227-97A
- 5) CONCRETE STRENGTH 5000 PSI. MIN. 28 DAYS

JOLLEY PRECAST, INC.  
 860-774-9066

**WILLIAM F. SMITH**  
 No. 05084  
 REGISTERED PROFESSIONAL ENGINEER

PROPOSED OWTS NEW CONSTRUCTION PLAN  
 PREPARED FOR  
**COLLEEN STANTON**  
 MAP 1-14 BLOCK 40 LOT 54  
 CRAIG AVENUE & SUMMERFIELD LANE  
 TIVERTON, RHODE ISLAND

SCALE: AS NOTED    DATE: AUGUST 23, 2007

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