



# Government Gazette

OF

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[1968

HEALTH ACT, 1911-1966.

Public Health Department,  
Perth, 24th July, 1968.

HIS Excellency the Lieutenant Governor in Executive Council, acting pursuant to the provisions of subsection (5) of section 343 of the Health Act, 1911-1966, has been pleased to make the regulations set out in the schedule hereunder, to have effect on and after the 1st January, 1969.

W. S. DAVIDSON,  
Commissioner of Public Health.

Schedule.

### REGULATIONS

#### DIVISION 1.—PRELIMINARY.

1. (1) These Regulations may be cited as the Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations.
  - (2) These regulations have effect in every district within the State.
  2. These regulations are divided as follows—
    - 1.—Preliminary.
    - 2.—Applications and installations.
    - 3.—Construction and sizes of septic tanks.
    - 4.—Restricted flush fixtures.
    - 5.—Dry-type tanks and bore holes.
    - 6.—Disposal of contents of septic tanks and other receptacles for drainage.
    - 7.—Disposal of effluent and liquid wastes.
    - 8.—Manufacturers.
- Schedules.

## 3. In these regulations—

“Commissioner” means the Commissioner of Public Health;

“apparatus” includes any apparatus for the bacteriolytic treatment of sewage, and all pipes, drains, fixtures, fittings, closets, buildings and any source of water on the premises used in connection therewith;

“combined system” means an apparatus designed to receive household and such other liquid wastes as the Commissioner may approve, as well as sewage;

“effluent” means the liquid discharge from the bacteriolytic treatment tank;

“fixtures” means all necessary appurtenances, that may be attached to the plumbing or drainage system of premises and are intended for the collection or retention of any wastes or waste waters for ultimate discharge into a drain or sewer;

“fittings” means all pipes, meters, or other apparatus used for or in connection with the supply of water, and all pipes, cisterns, traps, syphons, manholes, ventilators and all other apparatus connected with and requisite to secure the safe and proper working of any sewer, drain or water supply fixtures;

“liquid wastes” means bathroom, kitchen, scullery and laundry wastes, stable washings and any other domestic or trade wastes, other than effluent, that are permitted to be discharged by means of a drain to a receptacle for drainage;

“receptacle for drainage” means a soak well, french drain, leach drain or impervious sump;

“separate system” means an apparatus designed to receive faecal matter and urine only;

“septic tank” means that part of an apparatus for the bacteriolytic treatment of sewage designed to retain sewage for bacteriolytic treatment;

“the Act” means the Health Act, 1911.

## DIVISION 2.—APPLICATION AND INSTALLATION.

4. (1) The owner, or person authorised to act on behalf of the owner, of any premises whereon it is intended to construct an apparatus shall apply to the Commissioner on the prescribed form for permission to construct the apparatus, and shall pay the prescribed fee.

(2) Where the proposed apparatus is to be constructed in conjunction with the erection of a new building, then the application shall be lodged with the local authority with the building plan.

5. (1) An application pursuant to regulation 4 shall be in the form of Schedule “A” to these regulations and shall be accompanied by—

(a) a copy of plan and specifications of the proposed apparatus showing plan and longitudinal section to a scale of not less than one-quarter of an inch to each foot;

(b) two copies of a block plan of the premises accurately drawn to a scale not less than one-eighth of an inch to each foot, showing—

(i) the position of all buildings erected or proposed and the position of the proposed apparatus;

(ii) the position and dimensions of the closet, the position of the door and pedestal, and details of ventilation;

(iii) the position of all drains, pipes, inspection openings, vents, traps and junctions in relation to buildings and boundaries;

(iv) the sizes of pipes and fittings and the fall of the drains;

(v) details of the effluent disposal system; and

(vi) the source of water supply to be used in connection with the apparatus; and

(c) if so requested by the Commissioner, a detailed architectural drawing of the proposed apparatus.

(2) No alteration or deviation from the approved plans shall be made until an amended plan has been lodged with the local authority.

(3) Any person who gives any false or misleading information in, or in relation to, an application under this Division commits an offence.

6. A person who applies for permission to construct a combined system shall, in addition to complying with the requirements of regulation 5 of these regulations, show on the block plan the position, type and proposed use of all fixtures intended to discharge into the apparatus, and shall also show particulars of all drains, pipes, inspection openings, vents, traps and junctions to be used in connection with the apparatus.

7. (1) All materials, fixtures and fittings to be used in the construction of an apparatus shall be first approved by the Commissioner but for the purposes of this regulation, a material, fixture or fitting which has been branded in accordance with the by-laws made under the Metropolitan Water Supply, Sewerage and Drainage Act, 1909, or the Country Towns Sewerage Act, 1948, shall be deemed to have been so approved by the Commissioner if the material, fixture or fittings bear a mark indicating that they have been inspected by a person authorised under one of those Acts or these regulations, and passed as fit for use.

(2) All materials, pipes, bends, junctions, traps, vents and apparatus shall be sound and free from defects and shall be installed in accordance with the By-laws and practices of the Metropolitan Water Supply, Sewerage and Drainage Board, or the Country Towns Sewerage By-laws, as the case requires and these regulations.

8. (1) All educt vents in connection with septic tanks and receptacles for drainage, whether on combined systems, separate systems or liquid wastes only, shall be fitted, by the owner, with an approved mosquito-proof cowl and be so maintained by him.

(2) Where a back vent is required but cannot be connected to the educt vent by means of a saddle piece, the back vent shall also be fitted with an approved mosquito-proof cowl to be so maintained.

#### Inspection and Approval to Use an Apparatus.

9. A person who constructs an apparatus, pursuant to a permit issued by the Commissioner, whether as owner or contractor to the owner or otherwise, shall forthwith, after the construction of the apparatus is completed, notify the local authority of the fact.

10. (1) A local authority which has received a notification in accordance with regulation 9 shall as soon as reasonably practicable thereafter arrange for the apparatus to be inspected with regard to its compliance with the plans and specifications relating to the permit under which the construction was undertaken, and the standard of materials and workmanship.

(2) If the apparatus complies with the requirements of these regulations, the local authority shall grant approval for the use of the apparatus, and issue a certificate in the form of Schedule "B" to these regulations.

11. A person who gives notice to the local authority in accordance with regulation 9 of these regulations shall prepare the apparatus for inspection at the time set by the local authority or its officer, and in particular shall—

- (a) fill the treatment tank to overflow level with clean water 24 hours prior to inspection; and
- (b) ensure that all lines of drain, fixtures and fittings are exposed to view, and all inspection openings are unsealed.

#### Tests.

12. The apparatus shall be submitted to hydrostatic and mirror tests, and such other tests as an Inspector may order.

13. The equipment, material, power and labour necessary for the inspection and tests shall be furnished by the person installing the apparatus.

14. Any materials, pipes, bends, junctions, fittings, fixtures and apparatus found to be defective shall be removed and replaced and all defective joints made tight and every part of the work shall be made to conform to these regulations and shall be again subject to the approval of the Commissioner or Inspector.

#### Prohibiting Entry of Certain Matters into Tank.

15. The occupier of any premises whereon there is an apparatus, shall not cause or permit any wastes from any business or industry to discharge into the apparatus except with the approval of the Commissioner.

16. The Commissioner may forbid the discharge into a septic tank of any matter which may interfere with the efficient bacterial operation of the septic tank.

17. No person shall turn into, or cause or suffer to enter, any apparatus or receptacle for drainage used for the reception of effluent or liquid wastes—

- (a) any surface or subsoil drainage, rain water from any pavement or roof, or overflow water from rainwater tanks or flushing systems, or other relatively clean water.
- (b) any inflammable or explosive materials that are not readily soluble in water, or any materials which when mixed with sewage or water are liable to form explosive compounds or to interfere with the treatment process;
- (c) any insoluble matter or articles, dead animals, or rubbish whatsoever; or
- (d) any liquids or solids that are bactericidal in effect in such quantity as to militate against the proper functioning of the septic tank.

#### Interfering with Tanks.

18. No person shall, without first obtaining permission in writing from the local authority, dismantle or remove wholly or in any part any apparatus, or alter or change the mode of operating the apparatus.

#### Damaged and Defective Tanks Not to be Used.

19. (1) A person shall not use a septic tank that becomes damaged or defective.

(2) The owner of any premises shall not permit or suffer any person to use on such premises any septic tank which is damaged or defective.

#### Prohibition.

20. A permit shall not be issued for the installation of a septic tank for any property which can be connected to an existing sewerage system, unless the Commissioner is satisfied that in all the circumstances it would be unreasonable to refuse the issue of the permit.

21. (1) No septic tank shall be constructed closer than 4 feet to the foundations of any house or other building, or the boundary of any lot, unless otherwise approved by the local authority.

(2) No foundations of any house or other building or additions thereto shall be permitted closer than 4 feet to any existing septic tank, unless otherwise approved by the local authority.

(3) A person shall not cause any structure to be erected above any septic tank, receptacle for drainage or drainage line if that structure—

- (a) obstructs free access to the septic tank, receptacle for drainage or drainage line; or
- (b) has walls on more than one side or end.

22. A gully trap shall not be used in an installation for the bacteriolytic treatment of sewage.

#### Fees.

23. (1) The fee to be paid to the Commissioner by an applicant for a permit to construct an apparatus is six dollars.

(2) Where the local authority carries out the inspection of the installation of the apparatus, the Commissioner shall pay to the local authority one half of the fee received under this regulation.

(3) Where a local authority undertakes a general scheme for the installation of septic tanks in accordance with Part IV of the Act, the local authority shall pay to the Commissioner one-half of the fees prescribed in this regulation and in such a case the provisions of sub-regulation (2) of this regulation do not apply, but if the number of installations in the scheme is 100 or more, the fees to be paid by the local authority to the Commissioner shall be one-quarter of the fees prescribed by sub-regulation (1) of this regulation and in such a case the provisions of sub-regulation (2) of this regulation do not apply.

DIVISION 3.—CONSTRUCTION AND SIZES OF SEPTIC TANKS.

24. Every septic tank shall have a minimum water level of 3 feet 6 inches, except where otherwise approved by the Commissioner.

25. (1) When the capacity of a septic tank exceeds 450 gallons, the tank shall be divided into two chambers by means of a fixed durable partition, and the partition shall be located so that the capacity of the first chamber is twice that of the second chamber.

(2) Suitable openings with a full unobstructed area of not less than 24 sq. inches shall be provided in the partition at approximately half the liquid depth in the tank and so placed as to ensure the maximum length of flow through the tank.

26. Every septic tank shall be so constructed as to be impervious.

27. Every septic tank shall be constructed of good quality bricks, set in 3 in 1 cement mortar, and covered internally with a  $\frac{1}{2}$  in. thick watertight cement render, or spun or vibrated, reinforced concrete, or other approved material.

28. Every domestic septic tank shall have a liquid capacity in gallons calculated as follows:—

(a) tanks serving or to serve water closets and urinals only—

No. of persons using	Liquid capacity—gallons
1-10	400 minimum

and where the number of persons is greater than 10 and not more than 100 the liquid capacity of the tank in gallons shall not be less than 300, plus 10 gallons per person;

(b) tanks treating or to treat all household wastes—

No. of persons using	Liquid capacity—gallons
1-10	700 minimum

and where the number of persons is greater than 10 and not more than 100, the liquid capacity of the tank in gallons shall not be less than 400, plus 30 gallons per person;

(c) A septic tank to serve more than 100 people shall be of the dimensions, design and construction as the Commissioner determines.

29. (1) The sizes for septic tanks, other than domestic tanks, shall be calculated on a basis of 300 gallons for a separate system and 400 gallons for a combined system plus the number of gallons per person shown in the following table—

Type of Premises	Separate System	Combined System
Hotel	20	40
Motel	15	30
School (Boarding)	15	30
School (Day)	6	10
Public Building (Frequent use)	3	6
Public Building (Infrequent use)	1	2
Caravan Park	20	30
Swimming Pool	2	3
Drive-In Theatres (2 persons per car)	2	2
Factories and Shops (based on the number of persons therein on any 8 hour shift)	10	15
Construction Camps (Temporary)	5	10
Clubs	2	3
Clubs (Licensed)	5	7

(2) The sizes of septic tanks to be used in hospitals shall be as required by the Health and Medical Departments, provided that no separate system shall be of less than 400 gallons capacity and no combined system shall be of less than 700 gallons capacity.

30. A septic tank shall have a minimum air space between water level and under side of cover of 15 inches vertically.

31. Rectangular septic tanks shall be so constructed that the internal effective length shall be not less than twice the internal effective width, and the partition so placed that the first compartment is twice the capacity of the second compartment.

## Precast Concrete Tanks.

32. All precast concrete septic tanks shall conform to the following requirements:

- (a) Concrete shall contain not less than 600 lbs. of cement per cubic yard, with a maximum water/cement ratio of 5 gallons of water to every 94 lbs. of cement, and shall be mixed from materials complying with Code No. C.A. 2 or A. 77 or in accordance with A.64, of the Standards Association of Australia, and shall have a compressive strength of not less than 3,000 P.S.I. at 28 days.
- (b) All concrete produced in precasting yards, and intended for the construction of any apparatus for the bacteriolytic treatment of sewage, shall be weigh batched.
- (c) (i) Total compaction shall be secured by high ratio spinning, suitable to the diameter of the section chosen, or, in the case of vertically and horizontally cast tanks, shall be by the use of form, immersion or table vibrators operating at not less than 4,500 cycles per minute.
- (ii) Immersion vibrators shall be inserted into the concrete at intervals of not more than 18 in. and the concrete shall be placed in continuous shallow layers not exceeding 12 in. in depth.
- (iii) The vibrators shall be inserted vertically and shall not be used to flow the concrete.
- (iv) Where form vibrators are used, the forms shall be capable of withstanding the vibration without loss of watertightness.
- (v) Vibration at rate of not less than 4,500 cycles per minute shall continue for not less than one minute in the case of form and table vibrators.
- (vi) Where immersion vibrators are used, each insertion of a poker vibrator shall be of not less than 20 seconds duration.
- (vii) The diameter of any immersion vibrators shall not exceed one-third of the thickness of the concrete section.
- (d) (i) Form work shall be coated with a suitable release agent which will not retard the surface of the concrete.
- (ii) Forms shall be gently prised from the concrete surfaces.
- (iii) Any surface exhibiting honey-combing, voids, flow lines, or cold joints shall be rejected.
- (e) Precast concrete septic tanks may be one of two types—
- (i) series type as shown on application form, the internal diameter of the first tank to be 60 inches and of the second to be 48 inches; or,
- (ii) horizontal cylindrical tanks as shown on application form, the length to be 8 feet and the internal diameter to be of 58 inches with a water level of 45 inches.
- (f) (i) The walls of cylindrical septic tanks shall be reinforced with steel mesh complying with A.S.A. 84, and with the requirements of the following table—
- | Internal Pipe Diameter<br>—inches | Reinforcement Mesh No. |
|-----------------------------------|------------------------|
| 48                                | 608                    |
| 60                                | 606                    |
- or, by a helically wound grid of hard drawn steel wire providing an equivalent strength of circumferential steel per unit length of cylinder.
- (ii) All joints in the steel fabric shall be made by tying a full two mesh over lap. Spun tanks shall have a minimum of  $\frac{1}{2}$  inch cover and vibrated tanks shall have a minimum of  $\frac{3}{4}$  inch cover.
- (g) The minimum wall thickness shall be not less than one-twenty-fourth of the maximum internal diameter.
- (h) Each septic tank shall—
- (i) have maximum absorption of 10 per cent.; and,
- (ii) be able to withstand a load of at least 1,500 lb. per ft. on the barrel of the pipe, at 14 days.

- (i) Where a septic tank is tested for the purpose of ascertaining whether it complies with this regulation the test shall be carried out in accordance with A.S.A. 35, 1957 and A.S. Nos. A.100-A.110, 1957, except that tests may be carried out by the University of Western Australia, Government Chemical Laboratories or such other authority as the Commissioner directs.
- (j) The ends of concrete cylindrical horizontal tanks shall be in one piece, not less than  $2\frac{1}{2}$  inches thick, and shall be reinforced with No. 606 steel mesh and shall be keyed and mortared to the body of the tank and shall be watertight.
- (k) The bottom in vertically installed tanks shall be poured using concrete complying with paragraph (a) of this regulation and shall be 4 inches thick and extending 3 inches beyond the walls in all directions and shall be reinforced, as and where required by the local authority.
- (l) The covers of vertical tanks shall be of concrete, not less than  $2\frac{1}{2}$  inches thick and shall be reinforced with 606 steel mesh, made in sections and the joins shall be either rebated or  $45^\circ$  splayed.
- (m) Heavy duty covers that are to be subjected to wheeled traffic shall be to individual specifications, approved by the Commissioner.
- (n) Concrete test specimens of covers shall provide a flexural strength of 300 lb. P.S.I. at 28 days and shall be designed to carry a uniformly distributed load of 150 lb. per sq. foot.
- (o) Partitions where required, shall be constructed of concrete complying with paragraph (a) and shall be 2 inches thick, reinforced with 606 steel mesh and all joints of mesh to have a full two mesh overlap and not less than  $\frac{1}{2}$  inch concrete cover.
- (p) Appropriate inspection openings, 6 inches in diameter, shall be provided in the cover above the vertical leg of the inlet and outlet fittings of the septic tank.
- (q) The covers to inspection openings shall be of cast iron or non-ferrous metal and when in place after installation, the inspection opening covers shall fit neatly to prevent the ingress of water or egress of mosquitoes.

#### Cast in Situ Concrete Tanks.

33. (1) All concrete work in connection with the construction of *in situ* concrete septic tanks, shall be carried out in strict accordance with S.A.A. C.A. 2—1963, employing concrete mixes complying with paragraph (a) of regulation 32 of these regulations.

(2) All concrete shall be poured in continuous shallow layers not exceeding 12 inches in depth.

(3) An immersion vibrator, operating at not less than 4,500 cycles per minute, shall be inserted vertically at not more than 18 inch intervals.

(4) All form work shall be watertight, and coated with a suitable release agent which will not retard the surface of the concrete.

(5) Dimensions and reinforcements shall be in accordance with the plans and specifications set out in Schedule "C" to these regulations.

(6) All steel meshes shall comply with A.S. No. 84—1958.

(7) The tank shall be filled with water immediately the forms are removed.

(8) The covers shall consist of a central *in situ* reinforced slab 5 inches thick rebated on each end 2 inches x  $1\frac{1}{2}$  inches, and each end shall be covered with removable precast slabs 2 feet 6 inches long by not more than 18 inches by 2 inches thick reinforced with A.S. 606 steel mesh.

(9) Every partition shall be of concrete 2 inches thick reinforced with No. 606 steel mesh.

#### Rectangular Brick Tanks.

34. (1) All brick septic tanks shall be constructed of good quality bricks properly bonded and set in 3 in 1 cement mortar, and rendered internally to a smooth finish with a 2 in 1 cement mortar  $\frac{1}{2}$  inch thick.

(2) A reinforced concrete floor, a minimum of 4 inches thick, shall be poured prior to the laying of the bricks, and the floor shall extend 3 inches beyond the brickwork in all directions.

- (3) (a) The walls shall be a minimum of 9 inches thick to a maximum depth of 4 feet 3 inches.
- (b) From a depth of 4 feet 3 inches to 6 feet 3 inches, the walls shall be a minimum of 13½ inches thick.
- (c) From a depth of 6 feet 3 inches to a maximum depth of 7 feet 9 inches, the walls shall be a minimum of 18 inches thick.
- (4) No brick tank shall be so constructed as to have a depth of more than 8 feet.
- (5) Partitions shall be in accordance with the provisions of regulation 25 and 32 or sub-regulation (1) of this regulation, as the case requires.
- (6) Covers shall be so constructed as to comply with the provisions of sub-regulation (8) of regulation 33 of these regulations.

#### DIVISION 4.—RESTRICTED FLUSH FIXTURES.

35. (1) Notwithstanding the provisions of any other Division of these regulations, where—

- (a) the area or nature of land available will not permit the satisfactory disposal of effluent from a standard two gallon flush; or
- (b) there is not sufficient water available to operate a standard two gallon flush at all times,

but a water supply of not less than three thousand gallons is available, the Commissioner may approve the use of alternate fixture and fitting comprising a cistern, flush pipe and water closet pan, (herein referred to as "intermediate flush fixtures and fittings") of a design approved by the Commissioner, in which event the variations from the Metropolitan Water Supply, Sewerage and Drainage By-laws and these regulations set out in this regulation may be made.

(2) The Commissioner shall not approve a type of any intermediate flush fixtures and fittings unless—

- (a) each pan is constructed of suitable non-absorbent materials and is of good workmanship and free from defects;
- (b) each pan, when flushed, is completely washed over the interior surface;
- (c) the water seal retained in each pan after each flushing is not less than one inch;
- (d) each pan is branded with the volume of the flush by means of which it is designed to operate; and
- (e) the volume of flush by means of which the pan is designed to operate is not more than eight pints, or less than six pints.

(3) No type of flushing cistern for use in any intermediate flush fixtures and fittings shall be approved by the Commissioner unless—

- (a) at each operation of each cistern the volume of water flushed is not more than eight pints, or less than six pints;
- (b) each cistern is so constructed that when filled to operating capacity an air gap is left between the surface of the water and the outlet of the ball cock;
- (c) the volume of the water flushed by each operation of each cistern is painted or otherwise displayed by a durable medium on the exterior of the cistern;
- (d) the flush pipe has an internal diameter of not less than one and one-half inches, expanded to one and three-quarter inches at the point of connection to the closet pan;
- (e) the length of drain between the closet pan and the septic tank serving the closet pan, or between the closet pan and any junction with a drain leading from any other fixture in regular or daily use is not longer than ten feet; and
- (f) the vent horn on the water closet pan shall be deleted except where required under the By-laws of the Metropolitan Water Supply, Sewerage and Drainage Board.

#### Minimum Flush Fixtures and Fittings for Use with Septic Tanks.

36. (1) Notwithstanding the provisions of any other Division of these regulations and regulation 35 of these regulations where—

- (a) inspections and tests have been made, and it is not possible to dispose of the effluent from a septic tank used with a water closet pan by any of the methods set out in regulation 35 of these regulations; or



(b) where there is insufficient water to operate a flush of six pints or more at all times, the Commissioner may, provided that he is satisfied that satisfactory means of disposal of effluent can thereby be made available and that no nuisance will be created, approve the use of an alternative fixture and fitting comprising a cistern, flushing arrangement and pan (herein referred to as "minimum flush fixtures and fittings") of a design approved by the Commissioner, in which event the modifications set out in regulations 36 and 37 may be made.

(2) The Commissioner shall not approve a type of minimum flush fixtures and fittings unless—

- (a) the pan complies with the provisions of regulation 35 except that the trap may be omitted and replaced by a mechanically operated sealing device;
- (b) the seal is maintained by water or by a sealing device held in close contact with the pan outlet and the seal is maintained at all times except when the fitting is in use;
- (c) the design of the sealing device is such that force is required to open it and that it shall return to the closed position automatically after the pan is flushed;
- (d) the mechanism of the sealing device is readily accessible, reliable and not adversely affected by corrosive atmosphere; and
- (e) the pan is capable of being flushed with two pints of water and the manufacturer of the minimum flush fittings shall brand in an approved manner the flushing capacity thereof and for testing purposes the fittings shall flush with the quantity of water so indicated as the flushing capacity.

(3) Fixtures and fittings approved under this regulation shall be tested in suites and be clearly marked, and shall be so sold.

37. (1) The Commissioner shall not approve the use of minimum flush fixtures and fittings on any land unless—

- (a) the pan is mounted within eight feet of the septic tank;
- (b) the pan compartment is detached from the house or, if attached to the house, at least two sides are external walls, has no opening to the inside of the house and no opening to the pan compartment is within three feet of any opening to the house;
- (c) the dimensions and construction of the compartment shall be in accordance with the By-laws in force under the Act but, in addition, fixed glass louvres of not less than two square feet shall be provided in one of the external walls and any screens or partitions erected for the purpose of securing privacy are so placed as not to interfere with adequate fresh air ventilation of the pan compartment; and
- (d) a water supply of not less than 2,000 gallons is available to the land.

(2) Fixtures and fittings approved under this regulation shall not be connected to septic tanks to serve more than ten persons or to tanks treating all household wastes.

(3) Notwithstanding the provisions of Division 3 of these regulations, the liquid capacity of the septic tank in this Division shall be in accordance with the following table:—

Number of Persons Using	Capacity	Cyl. Dia.
1 to 10	400 gallons	60 inches

and the length of rectangular tanks shall be not less than twice the width and the effluent shall be disposed of within the boundaries of the premises by one of the means approved under Division 7 of these regulations.

(4) Notwithstanding the provisions of sub-regulation (2) of regulation 36 of these regulations—

- (a) where a water seal is used, the approved depth of the seal shall be maintained after flushing;
- (b) where there is no water seal, the sealing device shall be such that one pint of water poured into the pan above the seal will not leak past the seal in less than twenty seconds; and
- (c) the Inspector shall from time to time after the installation has been completed repeat the test on the seal and where the seal is defective shall require the owner by notice in writing within a time specified in such notice to repair or adjust the seal, or both, so that the test will be passed.

38. (1) The manufacturer of, or agent for fixtures or fittings referred to in this Division, may apply to the Commissioner for a certificate of approval of any type of fixture or fitting and each application shall be accompanied by—

- (a) full scale drawings and specifications relating to the type of pan or cistern in question; and
- (b) by an application fee calculated at the rate of two dollars for each type of pan or cistern in respect of which the certificate is sought.

(2) The Commissioner may require an applicant to furnish him with a specimen or working model of the type of pan or cistern in respect of which the certificate is sought and with such further particulars relating to that type as he considers necessary for the purpose.

(3) Upon receipt of an application the Commissioner shall cause to be examined and inspected the drawings and specifications and the specimen or model and the further particulars furnished, if any, and if he approves of the type, he shall cause a certificate of approval in the form of Form No. 2 in Schedule "D" of these regulations to be issued to the applicant.

39. (1) Upon receipt of an application in the form of Form No. 1 in Schedule "D" by a person who wishes to have a closet pan or flushing cistern tested, the Commissioner shall cause the pan or cistern to be tested by an inspector who is qualified to test such apparatus.

(2) If the closet pan or flushing cistern is found fit for use, the inspector shall affix a brand thereto consisting of the letters PHD ↑ which shall be one half inch in height.

(3) Before a brand is affixed to any closet pan or flushing cistern, the applicant shall upon demand pay to the Commissioner a charge for the registration of the application calculated as follows:—

	\$
For each closet pan tested	0.20
For each flushing cistern tested	0.20
And for each application	1.00

(4) No person other than an inspector referred to in subregulation (1) of this regulation shall affix a brand of such description as is referred to in that subregulation or any mark resembling that brand to a closet pan or flushing cistern.

40. The variations set out in this Division shall be the only variations permissible in respect of installations of intermediate and restricted flush fixtures and fittings, respectively, for use with septic tanks and the installations shall in all other respects be carried out in complete accordance with the requirements of the Metropolitan Water Supply, Sewerage and Drainage By-laws, the Country Towns Sewerage By-laws and the other Divisions of these regulations.

DIVISION 5.—DRY TYPE SEPTIC TANK.

41. Notwithstanding the provisions of any of the preceding Divisions of these regulations, where, for any reason, it is impractical to install any other type of treatment tanks, the Commissioner may approve the installation of a "Dry Type" Septic Tank, which shall comply with the following conditions:—

- (a) the tank shall only be installed with the written approval of the Commissioner and in a position approved by an Inspector;
- (b) the tank shall be constructed as set out in Schedule "E" of these regulations, unless otherwise specified by the Commissioner;
- (c) the tank shall not be within 20 feet of any house, or 6 feet of any boundary, or 100 feet of any well, creek or underground source of water;
- (d) the door of the privy shall be hung so that there is, when the door is closed, a clear space of at least 3 inches above and below it;
- (e) the wall of the privy opposite the door shall have a fixed glazed louvre of not less than 150 square inches situated 6 feet above floor level.
- (f) the pedestal pan shall be of an approved type, built into the floor of the closet and shall be provided with a close fitting lid.
- (g) the liquid capacity of the septic tank shall be in accordance with the following table:—

Number of Persons Using.	Capacity in Gallons
1 to 10	400

- (h) effluent disposal shall be by one of the means set out in Division 7 of these regulations except that a soak well may be reduced to 3 feet diameter and 4 feet deep and a french or leach drain to 20 feet minimum length; and
- (i) the educt vent shall be fitted with an approved mosquito proof cowl.

#### Bore-hole Type Privies.

42. (1) Where it is necessary to provide a temporary privy in accordance with the requirements of by-law 1AA of the Model By-laws Series A in force under the Act, such a privy may, subject to the approval of the local authority, be a bore-hole type privy, and for the purposes of this regulation a bore-hole privy shall include the pedestal type pan, the slab into which the pan fits and the enclosure.

(2) Any bore-hole privy installed in accordance with this regulation shall comply with the following conditions:—

- (a) it shall be fitted with a closet pan of a type in respect of which the Commissioner of Public Health has issued a certificate of approval in accordance with the provisions of the Act and these regulations;
- (b) it shall be installed only in a position approved by an Inspector, but in any event shall not be situated closer than 100 feet to any underground water supply intended or available for human consumption;
- (c) the bore-hole shall be not less than four feet or more than eight feet deep and not less than six inches or more than eight inches in diameter;
- (d) the privy shall comply with the requirements of sub-paragraphs (b), (c) and (d) of paragraph 1 of by-law 1B of the Model By-laws Series A in force under the Act;
- (e) the privy shall be inspected and approved by the Inspector of the local authority before it is used;
- (f) the privy shall be maintained in a clean, fly-proof and structurally sound condition and in accordance with the requirements of these regulations; and
- (g) prior to its removal from the site or immediately it ceases to be used, the privy shall be thoroughly cleansed and the bore-hole filled with clean earth.

(3) In pursuance of section 110 of the Act, the whole of every local authority district is prescribed as being the area within which provision may be made for the reception of nightsoil below ground by means of a bore-hole type privy.

#### DIVISION 6.—DISPOSAL OF CONTENTS OF SEPTIC TANK AND OTHER RECEPTACLES FOR DRAINAGE.

43. (1) Where a septic tank or receptacle for drainage requires emptying and cleansing, the local authority may order the occupier, or the owner of the premises, on which the septic tank or receptacle for drainage is situated, to have the emptying or cleansing carried out in such a manner and within such time as is specified in the order.

(2) Any person who fails to comply with an order of a local authority made under this regulation commits an offence.

#### DIVISION 7.—DISPOSAL OF EFFLUENT AND LIQUID WASTES.

44. Every apparatus shall be provided with an approved receptacle for drainage for the efficient disposal of effluent and in the case of separate systems, the liquid wastes from the premises shall also be provided with an approved receptacle for drainage.

45. Where nightsoil is disposed of by means other than deep sewerage or bacteriolytic treatment tanks, every premises so served shall be provided with an approved receptacle for drainage for the efficient disposal of liquid wastes.

46. The approved receptacle for drainage referred to in regulations 44 and 45 of this Division shall—

- (a) be constructed in accordance with the requirements shown on the plan and specifications issued with the permit and set out in Schedule "F" to these regulations;
- (b) be to the dimensions, and be located where, approved by the local authority;

- (c) be constructed so that effluent or liquid wastes will not be discharged into the ground at a distance less than one hundred feet from any well, stream or underground source of water intended or available for consumption by humans or animals; and
  - (d) not be constructed within 20 feet of any sub soil drainage system or open drainage channel.
47. (1) All effluent and liquid wastes from premises shall be conducted by means of an earthenware drain, or a drain of other approved material—
- (a) direct into a soak well or soak wells complying with the following provisions:—
    - (i) a sketch plan showing design, situation and construction of the soak well or wells together with the connections with the soak well, or soak wells, shall be submitted to and approved in writing by the local authority;
    - (ii) the soak well shall be at least 4 feet in diameter and 5 feet effective depth, unless otherwise approved in writing by the local authority;
    - (iii) where there is a series of more than one soak well, the earthenware drain from the house shall connect with only one of those wells, and the connection between the well into which the connection discharges and subsequent wells shall be by means of a long square junction on the outlet pipe;
    - (iv) any combined system shall have at least two soak wells; and
    - (v) the soak well shall not be situated closer than 6 feet to any boundary of a lot, building, septic tank or other soak well, unless otherwise approved by the local authority;
  - (b) into an approved ventilated impervious receptacle fitted with a gas-tight cover, which complies with the following conditions:—
    - (i) the contents of the receptacle shall be removed at such times and with such frequency and in such manner as are directed by an inspector;
    - (ii) the occupier shall not permit the receptacle to overflow or become offensive;
    - (iii) the receptacle shall be situated where directed by an inspector;
    - (iv) where the contents of the receptacle are to be disposed of by pumping to some other outlet, the capacity of the receptacle shall be not less than twice the estimated daily flow into the receptacle and the receptacle shall be provided with an approved automatically operated electrically driven pump, permanently installed and equipped with an approved warning device;
    - (v) where the contents of the receptacle are to be disposed of by tanker, then the capacity of the receptacle shall be as directed by the local authority;
    - (vi) impervious receptacles shall be suitably anchored in the ground to prevent them from floating or otherwise moving when subjected to external hydrostatic pressure; and
    - (vii) the material used in the construction of an impervious receptacle shall be to the same specification as that for a septic tank of equivalent size;
  - (c) into a french drain, which complies with the following conditions:—
    - (i) a sketch plan showing the design, situation and construction, together with the connections with, the french drain shall be submitted to and approved by the local authority before construction is commenced;
    - (ii) the dimensions of the trench shall be determined by the inspector, using the formula set out in Schedule "G" of these regulations;
    - (iii) the french drain shall not be situated closer than 12 feet from any dwelling, no closer than 20 feet from any window or door of any dwelling, nor closer than 6 feet from any boundary, unless otherwise approved by the local authority; and
    - (iv) the french drain, and all fittings connected thereto, shall at all times be maintained in good order and condition; or

- (d) into a leach drain which complies with the following conditions:—
- (i) a sketch plan of the proposed leach drain showing details of construction, dimensions, levels and situation and connections to be made shall have been submitted to and approved by the local authority before construction is commenced;
  - (ii) the drain shall have a 2 feet overall width;
  - (iii) the dimensions of the trench shall be determined by the inspector using the formula set out in Schedule "G" of these regulations, provided that no drain shall have a greater effective depth than 2 feet;
  - (iv) the drain shall be constructed of good quality bricks laid with open joints and having the top three courses or all courses above the overt of the inlet set in 6-1-1 mortar, or of precast concrete and concrete masonry segments which comply with the standard for blocks, Class A., S.A.A., A87-1963 and having all courses above the overt of the inlet set in 6-1-1 sand cement and lime mortar;
  - (v) the bed of the drain shall have a fall of 1 in 200 away from the inlet pipe;
  - (vi) a concrete slab shall be fitted into the bed beneath the inlet pipe to prevent scouring of the beds;
  - (vii) bridging pieces shall be placed between the walls of the drain at not more than 4 feet centres, and the bridging pieces shall have apertures equal to at least fifteen per cent. of their surface area and be so positioned as to allow the free passage of liquids;
  - (viii) if the walls of the drain are constructed of bricks, the bridging pieces shall extend to the top of the drain;
  - (ix) the drain shall be fitted with two feet by two feet reinforced concrete slabs, two inches thick, the reinforcement shall be No. 606 steel fabric over the whole slab and the joints shall be rebated or splayed at 45° and be grouted and sealed with weak mortar if the final earth cover is less than six inches;
  - (x) the drain shall not be situated closer than 12 feet from any dwelling, nor closer than 20 feet from any window or door of any dwelling, nor closer than 6 feet from any boundary; and
  - (xi) the leach drain, and all fittings connected thereto shall at all times be maintained in good order and condition, and when required by an inspector any leach drain shall be emptied, cleaned and re-built in such manner and within such time as may be specified in the requisition.

(2) Where a grease intercepting trap, soap trap, junction box, distribution pit, or any other approved fitting, is considered necessary by an inspector for the efficient functioning of the receptacle for drainage, it shall be installed at the premises and situated where directed by such inspector.

(3) The provision and repair, but not the maintenance and cleansing, of a receptacle for drainage as referred to in this regulation shall be the responsibility of the owner of the premises whereon the receptacle for drainage is provided or to be provided.

#### DIVISION 8.—MANUFACTURING.

48. (1) Any person who manufactures for sale any article intended for use in the installation of an apparatus for the bacteriolytic treatment of sewage, or receptacle for drainage, may apply to the Commissioner for registration of a mark or distinguishing brand to be used for the purposes of this Division.

(2) Every article intended for use in the construction of an apparatus for the bacteriolytic treatment of sewage shall be legibly marked with the name of the manufacturer or his registered mark or brand.

(3) The name, mark or brand referred to in regulation 48 (2) shall be moulded into the article at the time of casting or shall be marked by the use of a stencil with a durable branding material, before the article is removed from the factory.

(4) Every septic tank shall, immediately the moulds are removed, have the words "inlet" and "outlet" stencilled above their respective openings on the inside of the pipe.



This Page to be Completed by the Local Authority Inspector.

Location—(e.g. 3rd lot on the left south of Brown Street)

.....

Nature of Soil—(e.g. clay, sand, gravel, loam etc.).....

Water Supply—Source of supply and if permanent .....

.....

Type of disposal and dimensions—.....

.....

Recommendations to the Commissioner of Public Health.

Recommended—(Conditions)

Not Recommended—(Reasons)

.....

.....

.....

.....

.....

Health Inspector—..... Date.....

Local Health Authority—.....

Recorded and Recommended.

Date.....

Departmental Inspector.....

## SPECIFICATION.

**GENERAL:** All materials, pipes, bends, junctions, fittings, fixtures and apparatus shall be sound and free from defects and shall be approved and installed in accordance with the By-laws and practices of the Metropolitan Water Supply, Sewerage and Drainage Board, and Country Towns Sewerage Branch.

**PRECAST CYLINDRICAL TANK:** To be constructed as shown on plan, of concrete, minimum 2 in. thick, reinforced as specified in Division "C" of the Bacteriolytic Treatment of Sewerage Regulations. Joints of mesh shall be securely tied with a full two mesh overlap, or welded. Mesh to have at least  $\frac{3}{4}$  in. cover. Tank to be finished to a smooth surface internally. Bottom of tank to be of 4 in. concrete, extending 3 in. beyond the walls. Baffle to be 2 in. concrete, reinforced with No. 606 steel mesh. It shall be fastened securely to the walls. Inlet and outlet shall be by means of glazed earthenware squares set out from the wall and fixed securely. Invert of inlet to be 4 in. above the invert of the outlet.

**RECTANGULAR TANK (Built *in situ*):** To be constructed as shown on plan and have—

- (a) walls of a minimum 9 in. brickwork set in 3 in 1 cement mortar and rendered internally with 2 in 1 cement mortar  $\frac{1}{2}$  in. thick. The Baffle to be of  $4\frac{1}{2}$  in. brickwork and bonded into the walls or 2 in. reinforced concrete.
- (b) walls of a minimum 5 in. reinforced concrete, with a 2 in. reinforced concrete baffle cast with the walls. Concrete to be compacted by vibration.

Bottom of septic tank to be of 4 in. concrete extending 3 in. beyond the walls on all sides. Inlet and outlet squares to be placed and secured in the same manner as the cylindrical tank above.

**SEPTIC TANK COVERS:** Septic tank covers shall be of concrete in sections, with rebated or splayed joints. The concrete to be a minimum of  $2\frac{1}{2}$  in. thick, reinforced with No. 606 steel mesh fabric. Joints of mesh shall be securely tied with a full two mesh overlap, or welded. Provide 6 in. diameter inspection openings over inlet and outlet squares. Covers to be clearly marked with manufacturer's identification.

**DRAINS:** Drain pipes shall be first quality, tested glazed earthenware, socketed pipes of 4 in. diameter, laid with a uniform fall of 1 in 40. Pipes to be jointed with 2 in 1 cement mortar, properly cleaned off on the inside and neatly splayed off after being solidly overfilled. Joints to be covered with wet sand, until refilling of trench commences. All pipes and fittings shall be laid to such lines and grades and placed in the positions shown on the approved plans, or as may be directed by an Inspector. All pipe lines shall be tested to the standard hydrostatic and mirror tests as laid down by the M.W.S.S. and D. Board, Perth.

**SOAK WELL, LEACH OR FRENCH DRAINS:** To be constructed in accordance with the Public Health Department plan and specification provided.

**PEDESTAL PAN:** To be tested glazed earthenware, as shown, secured by brass screws to lead dowels provided in the floor and fitted with a back vent where required by the M.W.S.S. and D. Board By-laws.

**FLUSH PIPE:** Shall be of brass, copper, 6 lb. lead or drawn galvanised steel of not less than 22 gauge, or other approved material and shall have a minimum diameter of  $1\frac{1}{4}$  in.



**FLUSHING CISTERN:** To be of 2 gallon capacity, giving a 2 gallon flush unless otherwise approved. Cistern to be secured to wall by means of approved steel brackets and bolts.

**FLOOR:** To be concrete, 4 in. thick, laid with a fall of 1 in 24 to a suitable outlet.

**EDUCT VENT PIPE:** To be 4 in. in diameter and 20 gauge galvanised iron, tarred internally or asbestos, copper or other approved material taken off an earthenware square as shown, or 90° bend. To be not less than 18 ft. high and fitted with approved mosquito proof cowl. Pipe to be secured to wall plate with two wrought iron clips and bolts as shown on plan. Bottom of pipe to be blocked in cement to a height of 6 in. above ground level, the top of the cement to be weathered to a 45° angle.

**WATER SUPPLY:** Water supply pipes to cistern shall be adequate to fill any cistern at the rate of not less than one gallon per minute when one other tap on the service is turned full on.

**SPECIFICATION FOR CONCRETE:**

Mix 600 lbs. cement per cubic yard of concrete.

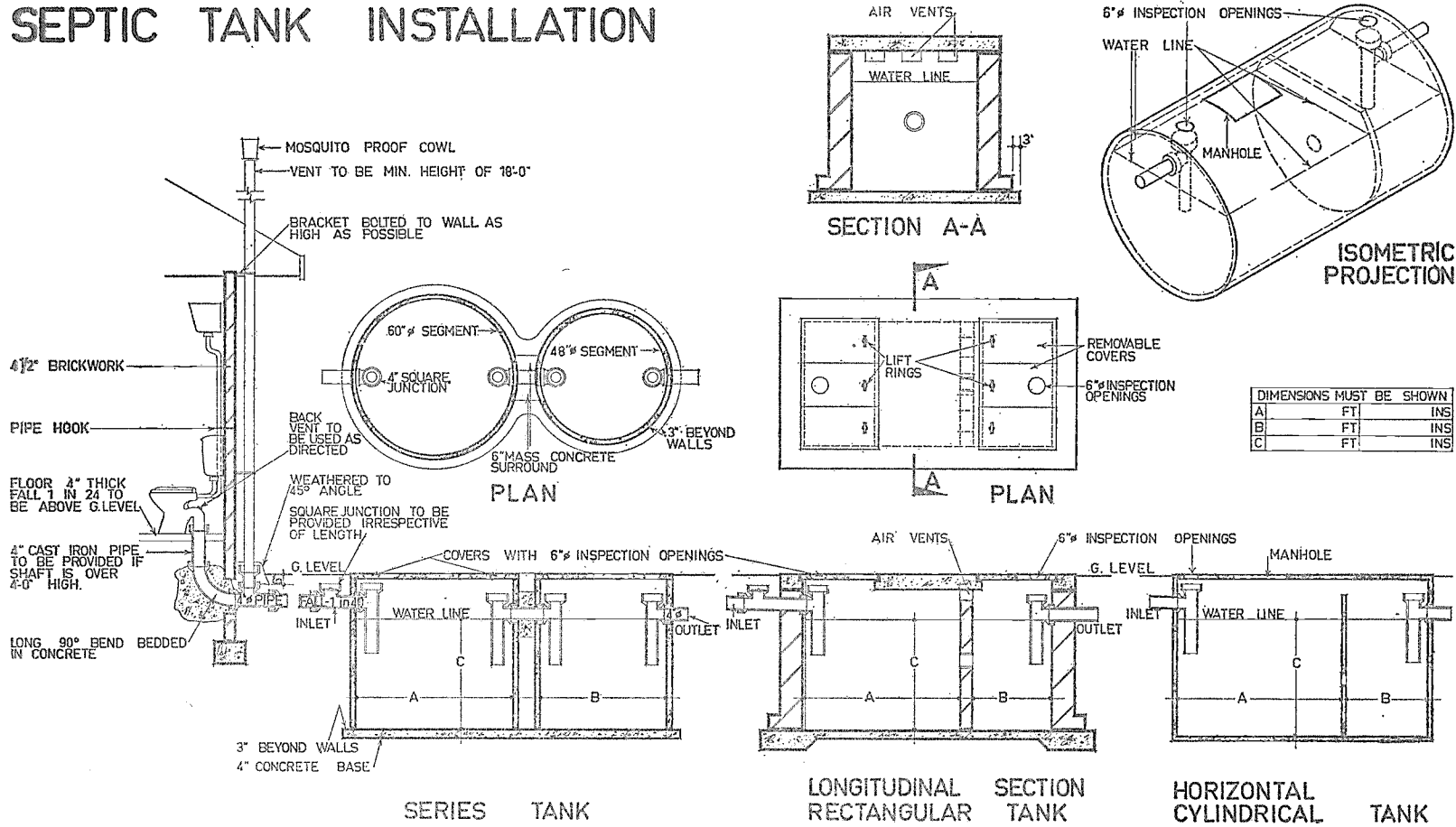
W/C ratio 0.5 or 5 gallons of water per bag of cement (approximately).

Aggregates to comply with S.A.A. Codes No. CA2, A77, A64.

Compaction by spinning or vibration.

---

# SEPTIC TANK INSTALLATION



DIMENSIONS MUST BE SHOWN

A	FT	INS
B	FT	INS
C	FT	INS

HEAD OFFICE USE.

Permit No.....	Dimensions	Official Stamp
Receipt No.....	(a) .....	
	(b) .....	
	(c) .....	

To be completed by Applicant

NAME (Block Letters) .....

LOT No. .... STREET ..... TOWN .....

BLOCK PLAN (not less than 1/8 in. scale)

Schedule "B".

Reg. 10 (2).

HEALTH ACT, 1911-1967.

CERTIFICATE OF CONSTRUCTION OF SEPTIC TANK.

Mr .....

Lot .....

At

House .....

Approval No. ....

Street .....

Town .....

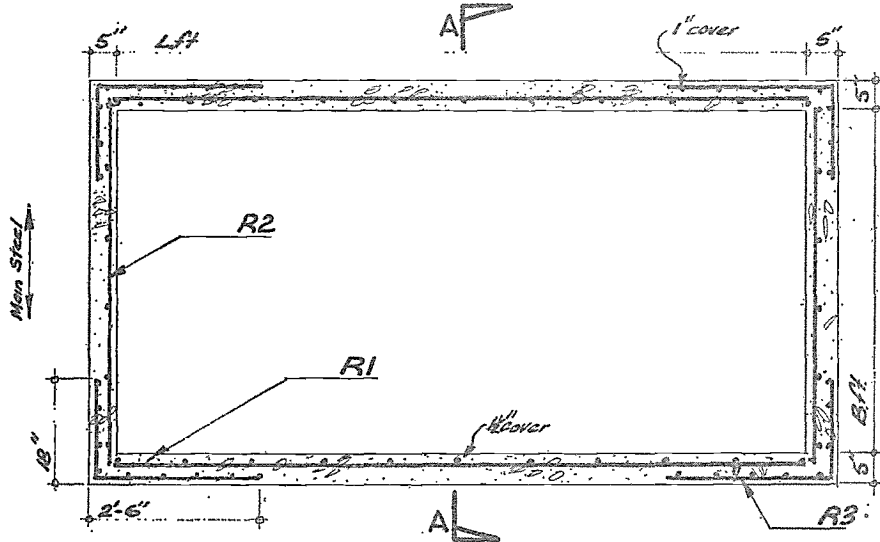
I certify that this septic tank installation has been inspected and completed in accordance with the plan and specifications approved by the Commissioner of Public Health.

Health Inspector ..... Date .....

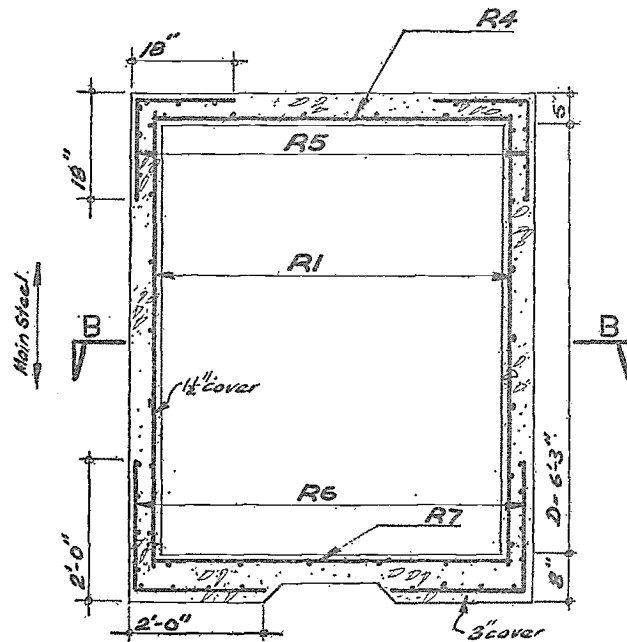
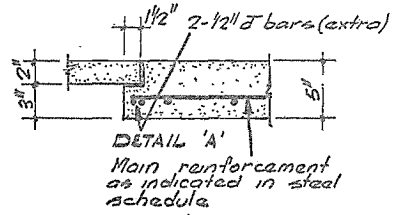
Local Health Authority .....

FORM 1

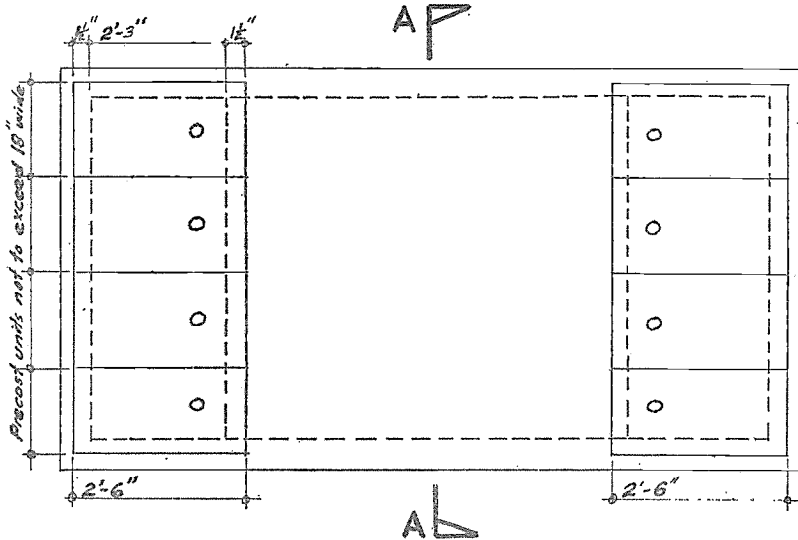
SEPTIC TANKS - CONCRETE STRUCTURAL DETAILS



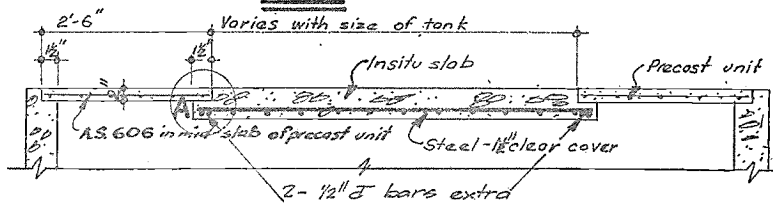
SECTION B-B



SECTION A-A



**PLAN**



**SECTION THRU' PRECAST & INSITU LID**

**REINFORCEMENT FOR 6'-3" DEEP WALL**

L x B x D	Reinforcement						
	R1	R2	R3	R4	R5	R6	R7
10' x 5' x 6'-3"	A.S. 620	A.S. 310	A.S. 603	A.S. 601	A.S. 603	A.S. 603	A.S. 602
12' x 6' x 6'-3"	A.S. 307	A.S. 310	A.S. 603	A.S. 601	A.S. 603	A.S. 603	A.S. 602
14' x 7' x 6'-3"	A.S. 307	A.S. 308	A.S. 601	A.S. 601	A.S. 603	A.S. 603	A.S. 602
16' x 8' x 6'-3"	A.S. 307	A.S. 307	A.S. 600	A.S. 600	A.S. 603	A.S. 603	A.S. 602
18' x 9' x 6'-3"	A.S. 307	A.S. 306	A.S. 600	A.S. 620	A.S. 603	A.S. 603	A.S. 602

**NOTES**

1. Concrete strength to be 3000 p.s.i. and 6" cube at 28 days.
2. Concrete work to be carried out in accordance with S.A.A. code C.A.2-1963
3. All meshes to comply with A.S.M. 80.
4. All concrete to be poured using vibrators.
5. Steel to be held in place using plastic tipped wire chairs
6. This drawing to be read in conjunction with plan and specification on application form.



REINFORCEMENT FOR 8ft. DEEP WALL

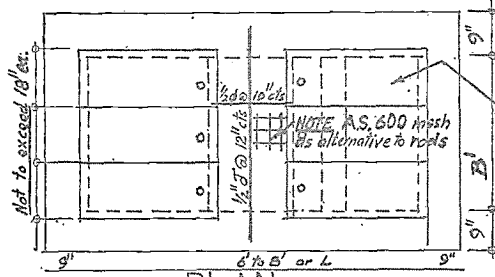
L x B x D	REINFORCEMENT						
	R1	R2	R3	R4	R5	R6	R7
10' x 5' x 8'	1/2" d @ 12 cts vertical 1/2" d @ 15 cts horizontal OR A.S. 307	1/2" d @ 18 cts vertical 1/2" d @ 15 cts horizontal OR A.S. 310	1/2" d @ 16 cts each way OR A.S. 601	1/2" d @ 12 cts each way OR A.S. 600	1/2" d @ 12 cts vertical 1/2" d @ 18 cts horizontal OR A.S. 307	1/2" d @ 12 cts vertical 1/2" d @ 18 cts horizontal OR A.S. 307	A.S. 602 mesh.
12' x 6' x 8'	As above	1/2" d @ 18 cts vertical 1/2" d @ 12 cts horizontal OR A.S. 307	As above	As above	As above	As above	As above
14' x 7' x 8'	As above	1/2" d @ 18 cts vertical 1/2" d @ 12 cts horizontal OR A.S. 307	As above	As above	As above	As above	As above
16' x 8' x 8'	As above	1/2" d @ 18 cts vertical 1/2" d @ 10 cts horizontal OR A.S. 306	As above	As above	As above	As above	As above
18' x 9' x 8'	As above	1/2" d @ 18 cts vertical 1/2" d @ 8 cts horizontal OR A.S. 305	As above	As above	As above	As above	As above

Concrete strength to be 3000 p.s.i. on a 6" cube at 28 days.  
For general notes see FORM 1

REINFORCEMENT FOR 10ft DEEP WALLS

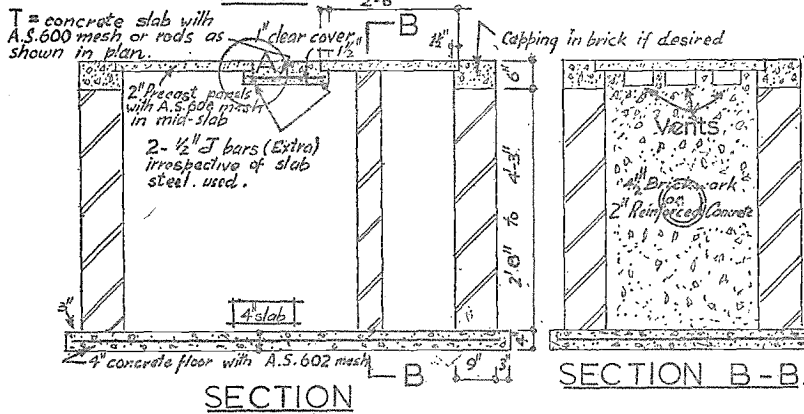
L x B x D	REINFORCEMENT						
	R1	R2	R3	R4	R5	R6	R7
10' x 5' x 10'	1/2" d @ 6 cts vertical 1/2" d @ 15 cts horizontal OR A.S. 303	1/2" d @ 18 cts vertical 1/2" d @ 15 cts horizontal OR A.S. 310	1/2" d @ 16 cts each way OR A.S. 601	1/2" d @ 12 cts each way OR A.S. 600	1/2" d @ 8 cts vertically 1/2" d @ 12 cts horizontal OR A.S. 600	As for R5	1/2" d @ 16 cts each way OR A.S. 601.
12' x 6' x 10'	As above	1/2" d @ 18 cts vertical 1/2" d @ 12 cts horizontal OR A.S. 307	As above	As above	As above	As above	As above
14' x 7' x 10'	As above	1/2" d @ 18 cts vertical 1/2" d @ 12 cts horizontal OR A.S. 307	As above	As above	As above	As above	As above
16' x 8' x 10'	As above	1/2" d @ 18 cts vertical 1/2" d @ 8 cts horizontal OR A.S. 305	As above	As above	As above	As above	As above
18' x 9' x 10'	As above	1/2" d @ 18 cts vertical 1/2" d @ 6 cts horizontal OR A.S. 303	As above	As above	As above	As above	As above

SCHEDULE "C" FORM 3 Reg. 34  
 STRUCTURAL DETAIL OF BRICK SEPTIC TANK.  
 (SAND CONDITIONS ONLY)



NOTE—This drawing to be read in conjunction with plans & specification on application form.

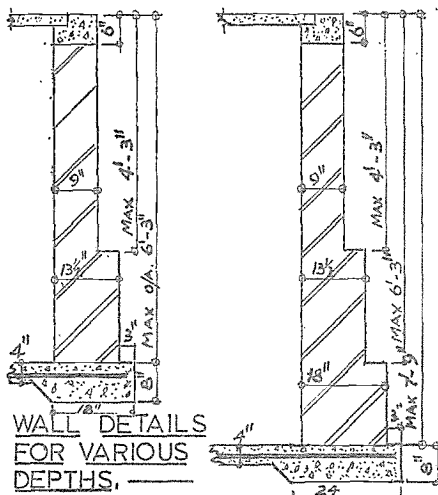
Concrete slabs designed for Live Load of 150lbs/sq'



T = concrete slab with A.S. 600 mesh or rods as shown in plan.

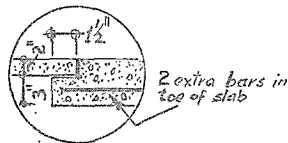
SECTION

SECTION B-B.



WALL DETAILS FOR VARIOUS DEPTHS.

B=breadth of tank.  
 T=thickness of slab over:



DETAIL-A.

Table of cover slabs to suit spans.

B	T	Reinforcement
4'	5"	A.S. 600 mesh.
5'	5"	1/2" ϕ @ 12" each way
6'	5"	A.S. 620 mesh.
		1/2" ϕ @ 10" cts, 2 ϕ @ 12" cts.
7'	5"	A.S. 360 mesh.
		1/2" ϕ @ 10" cts, 2 ϕ @ 12" cts.
8'	5"	1/2" ϕ @ 9" cts.
		1/2" ϕ @ 12" cts
9'	5"	1/2" ϕ @ 7" cts.
		1/2" ϕ @ 12" cts.



Schedule "D".

Reg. 39 (1).

Form No. 1.

HEALTH ACT, 1911-1967.

Health Act (Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations, 1968.

APPLICATION FOR TESTING OF SANITARY FIXTURES AND FITTINGS.

To the Commissioner of Public Health:

It is requested that you arrange for the articles specified hereunder to be tested for approval in accordance with the Health Act (Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations, 1968.

I undertake to pay the prescribed fee for the service on demand.

Articles:

Description: .....

Number: .....

Location: .....

Signature of Applicant: .....

Date: .....



Form No. 2.

HEALTH ACT, 1911-1967.

Health Act (Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations, 1968.

CERTIFICATE OF APPROVAL.

This Certificate of Approval is granted in respect of the type of article described hereunder in accordance with the Health Act (Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Wastes) Regulations 1968.

.....  
.....  
.....

Issued at Perth, this ..... day of ..... 19.....

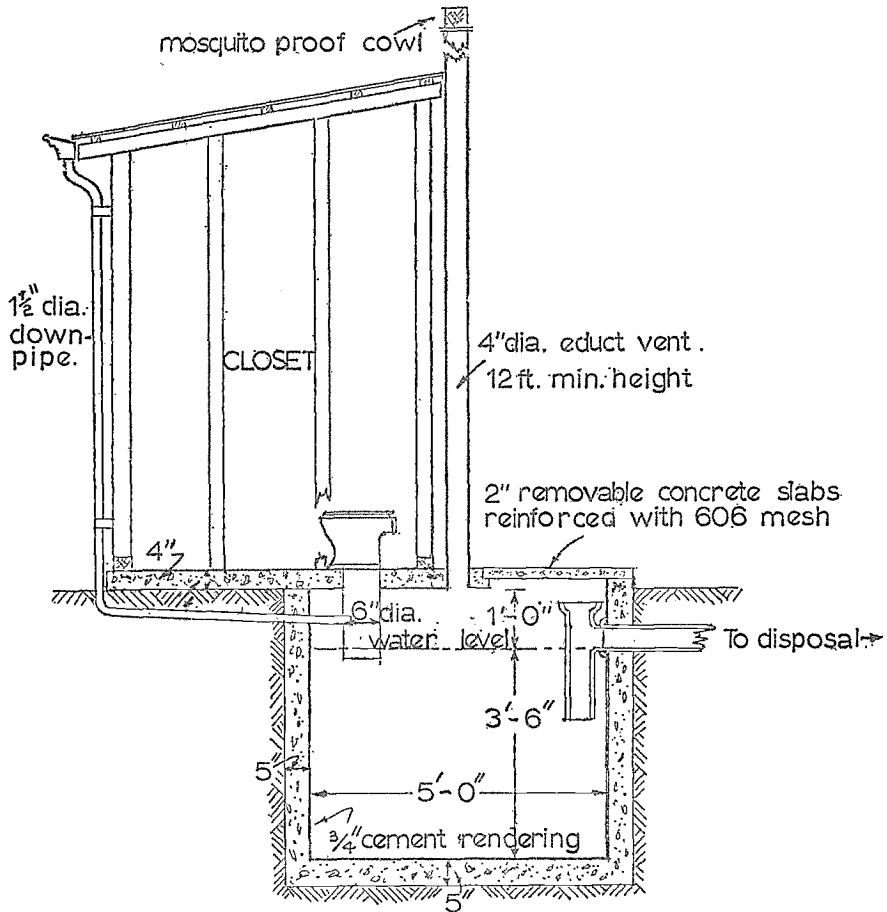
.....  
Commissioner of Public Health.



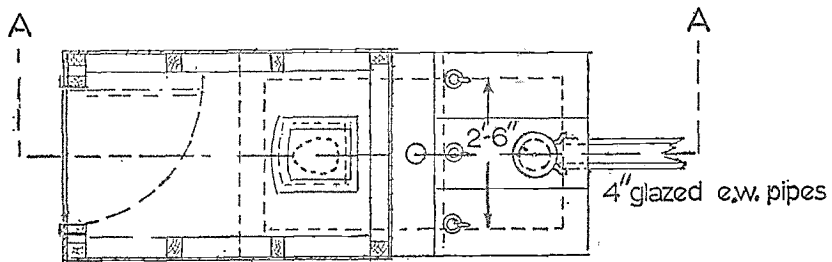
SCHEDULE "E"

Reg. 41

DRY TYPE SEPTIC TANK

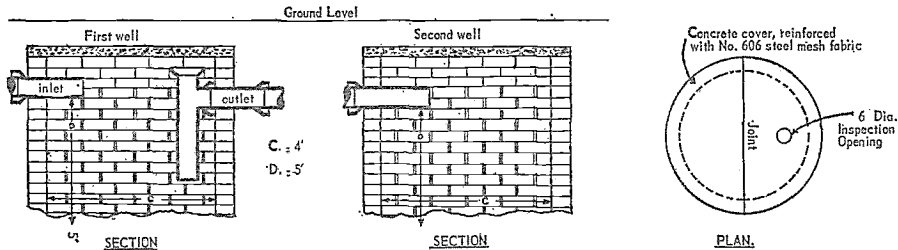


SECTION A-A:



PLAN

SCHEDULE "F"—Form No. 1.



SOAK WELL SPECIFICATION.

Soak well.—To be constructed as shown on plan, having the three top courses or all courses above the overt to be set in 2 in 1 cement mortar, the remainder in open jointed brickwork, laid dry, in stretcher courses, or constructed in approved cement segments or bricks which comply with the standard for blocks, Class A. A.S. A87-1963.

Size.—Bricks or segments shall have a minimum bearing face of 4 in. and shall be laid over the full bearing face in each course.

Sufficient openings shall be provided in any soak well to allow for the efficient disposal of the effluent, and shall be not less than 10% of the surface area.

Inspection opening and square junction to be provided as shown.

When completed it shall show a circular, smooth and regular internal surface.

All soak wells shall be 4 ft. in Dia. and with a 5 ft. effective depth unless otherwise specified or approved by the Local Authority.

The top of the soak well shall not be more than 12 in. or less than 6 in. below ground level, unless otherwise approved by the Local Authority.

Soak wells in series shall have a long square on the outlet as shown.

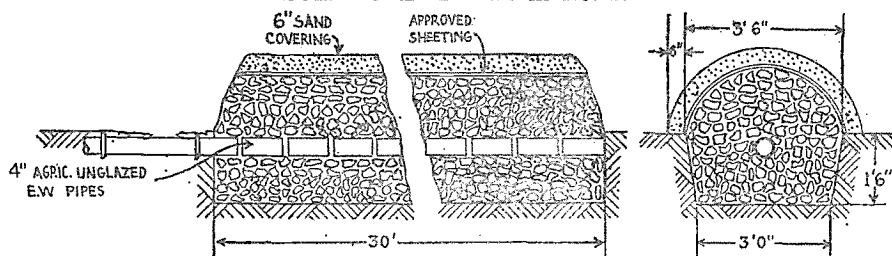
Cover.—Shall be of concrete in section with rebated or 45° splayed joint as shown, reinforced with No. 606 steel mesh fabric, joints of mesh shall be securely tied with a full two mesh overlap, unless otherwise specified.

The covers shall withstand a flexural test of 300 lbs. per sq. inch and a load bearing of 150 lbs. per sq. foot.

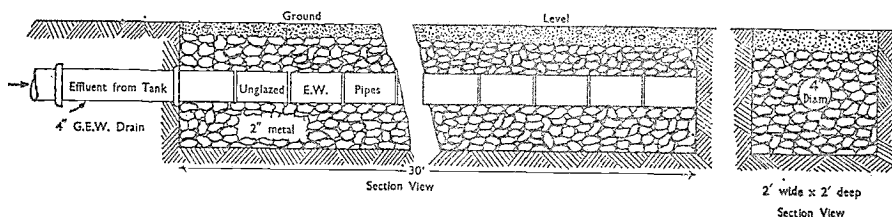
Traffic covers shall be constructed to specific Departmental Specifications.

No soak well shall be situated closer than 6 ft. to any building, boundary fence or septic tank, unless otherwise approved by the Local Authority.

SCHEDULE "F"—Form No. 2.



INVERTED FRENCH DRAIN



STANDARD FRENCH DRAIN.

Specifications.

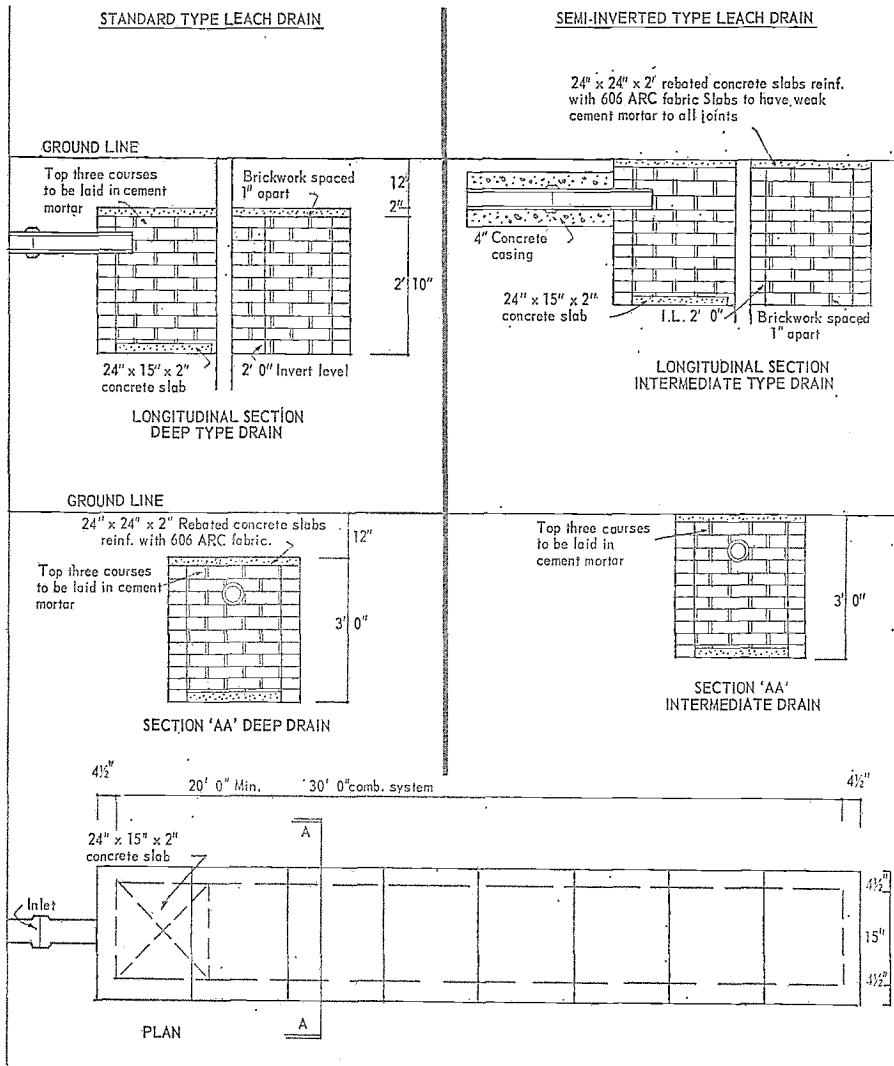
Trench to be not less than 30 ft. long, constructed as shown. Filling to consist of 2 in. or 3 in. gauge broken blue metal; filling on top may be of smaller gauge metal, with sand over approved sheeting.

Distributing pipe to be 3 in. or 4 in. diameter unglazed agricultural pipes laid with open butt joints, or other approved piping.

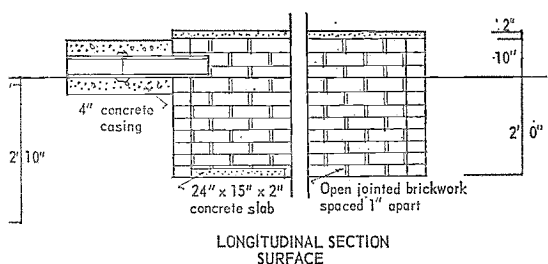
Grade shall be laid at not more than 1 in 200.

A French drain shall not be situated closer than 12 ft. from any dwelling, nor closer than 20 ft. from any window or door of any dwelling, nor closer than 6 ft. from any lot boundary.

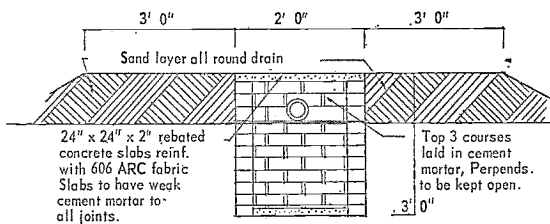
SCHEDULE "F"—Form No. 3.



FULLY INVERTED TYPE LEACH DRAIN



LONGITUDINAL SECTION SURFACE



SECTION 'AA' SURFACE DRAIN

DETAILS OF LEACH DRAINS.

No Leach Drain shall be situated closer than 12 feet from any dwelling, nor closer than 20 feet from any window or door of any dwelling.

**MINIMUM LENGTH:** Separate systems to have drain 20 long.  
Combined systems to have drain 30 long.

Reinforced concrete paving slab positioned beneath inlet, and brick spreader walls provided not more than 4 feet 0 inches centres.

**SEGMENTS:**

Where Segments are used, all courses above the overtop of the inlet to be laid in 3 in 1 cement mortar.

Reg. 47 (IC).

## Schedule "G".

Department of Public Health.

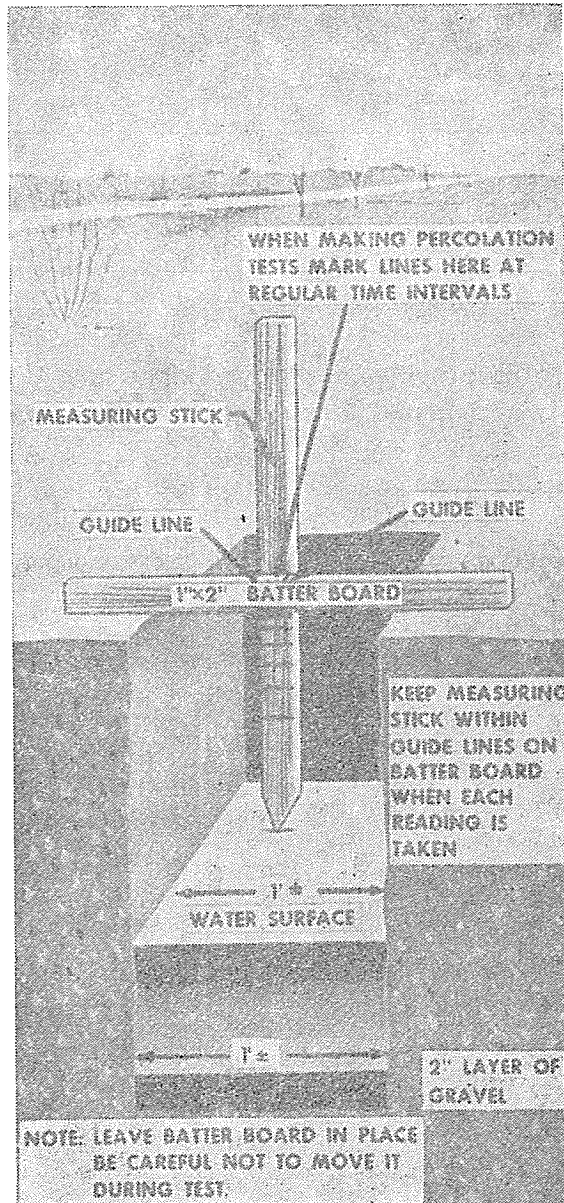
## FORMULA FOR DETERMINING ABSORPTIVE CAPACITY OF A SOIL.

1. Dig a hole with dimensions of 12 in. square and vertical sides to the depth of the proposed absorption trench.
2. Carefully scarify the bottom and sides of the hole in order to remove any smeared soil surfaces and to provide a natural soil interface into which the water may percolate. Remove all loose material from the hole. Add 2 in. of blue metal, or screened gravel, to protect the bottom from scouring and sediment.
3. Fill the hole with water and allow it to soak away. Preferably keep the hole filled overnight, possibly by means of an automatic siphon.
4. The following morning, fill or adjust water level to a depth of 6 in. above blue metal or gravel, insert measuring stick (as shown) and note time taken for water to fall 1 in.

The amount of effluent which can be disposed of per square foot of trench bottom per day is given by the following table:—

Time for Water to Fall 1 in.	Dose per sq. ft. Trench Bottom.
1 minute	3 gallons
2 minutes	2½ gallons
5 minutes	2 gallons
10 minutes	1½ gallons
30 minutes	¾ gallon
60 minutes	½ gallon
Over 60 minutes	Soil Unsuitable

The use of a diversion pit and stop board to divert drainage from one line of drain to another is recommended where large quantities of water are to be disposed of into difficult soils.



## HEALTH ACT, 1911-1966.

Department of Public Health,  
Perth, 24th July, 1968.

HIS Excellency the Lieutenant Governor in Executive Council acting pursuant to the provisions of the Health Act, 1911-1966, has been pleased to revoke the Bacteriolytic Treatment of Sewage Regulations, 1958, published in the *Government Gazette* on the 19th March, 1958, and reprinted pursuant to the Reprinting of Regulations Act, 1954, in the *Government Gazette* on the 11th January, 1965, with all amendments up to and including the 9th February, 1961, so that the revocation has effect on and after the 1st January, 1969.

W. S. DAVIDSON,  
Commissioner of Public Health.

## HEALTH ACT, 1911-1966.

Department of Public Health,  
Perth, 24th July, 1968.

HIS Excellency the Lieutenant Governor in Executive Council, acting under the provisions of the Health Act, 1911-1966, has been pleased to make the regulations set out in the Schedule hereunder to have effect on and after the 1st day of January, 1969.

W. S. DAVIDSON,  
Commissioner of Public Health.

Schedule.  
Regulations.

- |                                     |  |
|-------------------------------------|--|
| Principal regulations.              | 1. In these regulations the Health Act (Sewerage, Drainage and Underground Water Supply) Regulations, 1959, published in the <i>Government Gazette</i> on the 15th September, 1959 and reprinted pursuant to the Reprinting of Regulations Act, 1954, in the <i>Government Gazette</i> of the 11th January, 1965, with all amendments up to and including the 20th August, 1964, are referred to as the principal regulations. |
| Reg. 1 amended.                     | 2. Regulation 1 of the principal regulations is amended by deleting from lines one and two, the passage, "Sewerage, Drainage and".   |
| Regs. 3-10C and Schedule A revoked. | 3. The principal regulations are amended by revoking—<br>(a) regulations 3 to 10C, inclusive; and<br>(b) Schedule A.   |

## HEALTH ACT, 1911-1966.

Department of Public Health,  
Perth, 24th July, 1968.

HIS Excellency the Lieutenant Governor in Executive Council, acting pursuant to the provisions of the Health Act, 1911-1966, has been pleased to make the model by-laws set out in the schedule hereunder to have effect on and after the 1st day of January, 1969.

W. S. DAVIDSON,  
Commissioner of Public Health.

## Schedule.

## Model By-laws Series "A".

- |  |  |
|--|--|
| Principal by-laws.   | 1. In these by-laws the Model By-laws, Series "A" published in the <i>Government Gazette</i> on the 8th April, 1927 and reprinted in the <i>Government Gazette</i> on the 17th July, 1963, pursuant to the Reprinting of Regulations Act, 1954 with all amendments up to and including the 25th June, 1963 and amended from time to time thereafter by notice published in the <i>Government Gazette</i> are referred to as the principal by-laws. |
| By-law 1BA and heading thereto and By-laws 23 and 23A revoked. | 2. The principal regulations are amended by revoking—<br>(a) by-law 1BA and the heading "Bore-hole Type Privies" immediately preceding that by-law; and<br>(b) by-laws 23 and 23A.   |