

ORDINANCE NO. 73-4

AN ORDINANCE REGULATING THE USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS; DEFINING CERTAIN TERMS; REQUIRING OWNERS OF IMPROVED PROPERTIES TO CONNECT TO SUCH PUBLIC SEWER FACILITIES UNDER CERTAIN CIRCUMSTANCES; RESTRICTING PRIVATE WASTEWATER DISPOSAL; ADOPTING BY REFERENCE STANDARDS FOR WASTEWATER COLLECTION SYSTEM, TOWN OF LONGBOAT KEY DATED DECEMBER 1, 1972; PROHIBITING THE DISCHARGE OF CERTAIN WATERS AND WASTES IN PUBLIC SEWERS; PROHIBITING DESTRUCTION OF PUBLIC SEWERS; GRANTING CERTAIN POWERS AND AUTHORITIES TO CERTAIN OFFICIALS AND EMPLOYEES OF THE TOWN; PRESCRIBING PENALTIES FOR VIOLATING THE PROVISIONS HEREOF; PROVIDING FOR THE REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR THE SEVERABILITY OF THE PARTS HEREOF AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE TOWN OF LONGBOAT KEY:

Section 1. Definitions. Unless the content specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:

- (a) "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20° Centigrade, expressed in milligrams per liter.
- (b) "Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipe inside the walls of the building and conveys it to the building sewer, beginning ten (10) feet outside the inner face of the building wall.
- (c) "Building Sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.

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- (d) "Town" shall mean the Town of Longboat Key, Florida.
- (e) "Combined Sewer" shall mean a sewer receiving both surface runoff and wastewater.
- (f) "Director" shall mean the Town Manager of the Town of Longboat Key or his authorized deputy, agent or representative.
- (g) "Garbage" shall mean solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of produce.
- (h) "Industrial Wastes" shall mean the liquid wastes from industrial manufacturing processes, trade or business as distinct from sanitary wastewater.
- (i) "Natural Outlet" shall mean any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.
- (j) "Person" shall mean any individual, firm, company, association, society, corporation or group.
- (k) "pH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.
- (l) "Properly Shredded Garbage" shall mean the wastes from the preparation, cooking and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half ( $\frac{1}{2}$ ) inch (1.27 centimeters) in any dimension.
- (m) "Public Sewer" shall mean a sewer in which all owners of abutting properties have equal rights and is controlled by public authority.
- (n) "Sanitary Sewer" shall mean a sewer which carries wastewater and to which storm, surface and ground waters are not intentionally admitted.

- (o) "Wastewater" shall mean a combination of the water-carried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface and storm waters as may be present.
- (p) "Wastewater Treatment Plant" shall mean any arrangement of devices and structures used for treating wastewater.
- (q) "Wastewater Works" shall mean all facilities for collecting, pumping, treating and disposing of wastewater.
- (r) "Sewer" shall mean a pipe or conduit for carrying wastewater.
- (s) "Shall" is mandatory; "May" is permissive.
- (t) "Sludge" shall mean any discharge of water, wastewater or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.
- (u) "Storm Drain (building)" shall mean a building drain used for conveying rain water, surface water, ground water, subsurface water, condensate, cooling water or other similar discharge to a building storm sewer or a combined building sewer extending to a point not less than ten (10) feet outside the building wall.
- (v) "Storm Sewer" shall mean a sewer used for rain water, surface water, condensate, cooling water or other similar liquid wastes.
- (w) "Suspended Solids" shall mean solids that are in suspension in water, wastewater or other liquids, and which are removable by laboratory filtering.
- (x) "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.

Section 2. Use of Public Sewers Required.

(a) It shall be unlawful for any person to place, deposit or permit to be deposited in any unsanitary manner on any public or private property within the Town, or in any area under its jurisdiction, any human excrement, garbage or other objectionable waste.

(b) It shall be unlawful to discharge to any natural outlet within the Town, or in any area under its jurisdiction, any wastewater or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this ordinance.

(c) Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cess-pool or other facility intended or used for the disposal of wastewater.

(d) The owner, tenant or occupant of each lot or parcel of land within the Town which abuts upon a street or other public way containing a sanitary sewer served or which may be served by the wastewater disposal system and is not connected with such sanitary sewer, and upon which lot or parcel a building has been or shall be constructed for residential, commercial or industrial use, shall, within thirty (30) days after the placing of the sewer system in operation and the construction of all connections thereto from such sanitary sewer, or within thirty (30) days after the construction of such building, connect such building with such sanitary sewer, and shall cease to use any other method for the

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disposal of wastewater, wastewater waste or other polluting matter. All such connections shall be in accordance with rules and regulations and for such charges as shall be adopted from time to time by the Town Commission.

Section 3. Private Wastewater Disposal. The disposal of wastewater by means other than the use of the available sanitary wastewater system shall be in accordance with ordinances of the Town and laws of the State of Florida. The disposal of wastewater by private disposal systems shall be permissible only in those instances where service from the available sanitary wastewater system is not available.

Section 4. Adoption of Minimum Standards for Construction of Force Mains, Sanitary Sewers and Lift Stations. There is hereby adopted by reference "Standards for Wastewater Collection System Town of Longboat Key dated December 1, 1972," three (3) or more copies of which are on file with the Town Auditor and Clerk, identified as official copies, and shall there be kept available for public use, inspection and examination. Said sanitary sewer standards are adopted by reference as authorized by Florida Statutes, Section 165.191.

Section 5. Building Sewers and Connections.

(a) It shall be unlawful for any unauthorized person to make any connections with or opening into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a

written permit from the Director.

(b) When sewer service is required or desired, the owner or his agent shall make application on a special form furnished by the Director. The permit application shall be supplemented by any plans, specifications or other information considered pertinent in the judgment of the Director. Such permit, tapping and inspection fees as provided by ordinances of the Town shall be paid to the Town at the time the application is filed.

(c) All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the Town from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(d) A separate and independent building sewer shall be provided for every building except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

(e) Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Director, to meet all requirements of this ordinance.

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(f) The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town.

(g) In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary wastewater carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

(h) It shall be unlawful for any person to make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.

(i) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the Director before installation.

(j) The applicant for the building sewer permit shall notify the Building Inspector when the building sewer is ready for inspection and connection to the public sewer. The connection

shall be made under the supervision of the Building Inspector or his representative.

(k) All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazards. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the Town.

(l) In all new subdivisions, group housing developments and mobile home parks where there are in excess of twelve (12) dwelling units, plans for water and sewer service must be prepared by a registered professional engineer licensed to practice in the State of Florida. Plans for such water and sewer service must be approved by the Town and by the proper agencies of the State Department of Health and Rehabilitative Services prior to commencement of any construction.

(m) Construction of gravity sewers, lift stations and force mains must conform to Standards for Wastewater Collection System, Town of Longboat Key dated December 1, 1972. Building, sewer and all inside plumbing shall conform to the Southern Standard Plumbing Code as the same has been adopted and as amended from time to time by the Town. All such work must be inspected and approved by the Building Inspector before any new installations are connected to the existing public sewer system.

(n) Prior to installation of lines across private property to provide either water or sewer service, utility easements sufficient for the required installation and the maintenance thereof in a form acceptable to the Director shall be furnished to the Town.

Section 6. Use of the Public Sewers.

(a) It shall be unlawful for any person to discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water or unpolluted industrial process waters into any sanitary sewer.

(b) Storm water and all other unpolluted drainage, including cooling water, shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet approved by the Town Engineer.

(c) It shall be unlawful for any person to discharge or cause to be discharged any of the following described waters or wastes to any public sewers:

- (1) Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid solid or gas;
- (2) Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the wastewater treatment plant;

- (3) Any waters or wastes having a pH lower than 5.0 or greater than 10.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater works;
- (4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails, and paper towels, dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

(d) It shall be unlawful for any person to discharge or cause to be discharged the following described substances, materials, waters or wastes if it appears likely in the opinion of the Director that such wastes can harm either the sewers, wastewater treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property or constitute a nuisance. In forming his opinion as to the acceptability of those wastes, the Director will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the wastewater treatment process, capacity of the wastewater treatment plant and other pertinent factors. The substances prohibited are:

- (1) Any liquid or vapor having a temperature higher than one hundred fifty degrees (150°) Fahrenheit (65°C);
- (2) Any water or waste containing fats, wax, grease or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two degrees (32°) and one hundred fifty degrees (150°) Fahrenheit (0 and 65° C);
- (3) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Director;
- (4) Any waters or wastes containing strong acid iron pickling wastes or concentrated plating solutions, whether neutralized or not;
- (5) Any waters or wastes containing iron, chromium, copper, zinc, nickel, cyanide and similar objectionable or toxic substances, or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the Director;
- (6) Any waters or wastes containing phenols or other taste-producing or odor-producing substances in such concentrations exceeding limits which may be established by the Director as necessary, after treatment of the composite wastewater, to meet the requirements of the State, Federal or other public agencies of jurisdiction for such discharge to the receiving waters;
- (7) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Director in compliance with applicable State or Federal regulations;

## (8) Materials which exert or cause:

- (i) Unusual concentrations of inert suspended solids including but not limited to, Fullers earth, lime slurries and lime residues, or of dissolved solids including, but not limited to, sodium chloride, sodium sulfate, phosphates, nitrates and ammonia;
  - (ii) Excessive discoloration including, but not limited to, dye wastes and vegetable tanning solutions;
  - (iii) BOD (above 300 mg/l), chemical oxygen demand, or chlorine requirement in such quantities as to constitute a significant load on the wastewater treatment works;
  - (iv) Unusual volume of flow or concentration of wastes constituting "sludge" as defined herein;
- (9) Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such degree that the wastewater treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters;
- (10) Waters or wastes containing suspended solids in excess of 300 mg/l.

(e) If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in Subsection (d) of this section, and which in the judgment of the Director may have a deleterious effect upon the wastewater works,

processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Director may:

- (1) Reject the wastes;
- (2) Require pretreatment to an acceptable condition for discharge to the public sewers;
- (3) Require control over the quantities and rates of discharge; and/or
- (4) Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of Subsection (j) of this section. If the Director permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Director and the Department of Public Health, and subject to the requirements of all applicable codes, ordinances and laws.

(f) Grease, oil and sand interceptors shall be provided when, in the opinion of the Building Inspector they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Building Inspector and shall be located as to be readily and easily accessible for cleaning and inspection.

(g) Where preliminary treatment or flow-equalizing facilities are provided for any waters or wastes, they shall be

maintained continuously in satisfactory and effective operation by the owner at his expense.

(h) When required by the Director, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located and shall be maintained by the owner so as to be safe and accessible at all times.

(i) All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in this policy shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, and shall be determined at the control manhole provided or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the wastewater works and to determine the existence of hazards to life, limb and property. (The particular analyses involved will determine whether a twenty-four hour composite

of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from twenty-four hour composites of all outfalls, where pH's are determined from periodic grab samples).

(j) No statement contained in this section shall be construed as preventing any special agreement or arrangement between the Town and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the Town for treatment, subject to payment satisfactory to the Town by any such industrial concern.

Section 7. Protection from Damage. It shall be unlawful for any person to maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the wastewater works. This provision, however, shall not be construed to prevent persons authorized by the Town or the Director to perform maintenance and repairs in connection with the wastewater works.

Section 8. Powers and Authority of Inspectors.

(a) The Director, Building Inspector and other duly authorized employees of the Town bearing proper credentials and identification shall be permitted to enter all properties for the

purposes of inspection, observation, measurement, sampling and testing in accordance with the provisions of this ordinance. The Director, Building Inspector or their representatives shall have no authority to inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.

(b) While performing the necessary work on private properties referred to in Subsection (a) of this section, the Director, Building Inspector and other authorized employees of the Town shall observe all safety rules applicable to the premises established by the owners of such private properties.

(c) The Director and other duly authorized employees of the Town bearing proper credentials and identifications shall be permitted to enter all private properties through which the Town has an easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the wastewater works lying within said easement. All entry and subsequent work, if any, on said easement shall be done in full accordance with the terms of the easement to the private property involved.

(d) All persons engaged in the moving or demolition of buildings shall, prior to such movement or demolition, first locate the sewer lateral at the property line and obtain a permit from the

Town to cap such sewer. In applying for such a permit, the applicant shall be required to first submit an inspection ticket showing that such premises have been inspected by the Building Inspector.

Section 9. Violations. Any person (as defined in Section 1-2 of the Code of the Town of Longboat Key, Florida) found guilty of violating any of the provisions of this ordinance shall, upon conviction thereof, be punished in accordance with Section 1-2 of the Code of the Town of Longboat Key, Florida, by a fine not exceeding five hundred dollars, or imprisonment for a term not exceeding sixty days, with each day of such violation constituting a separate offense.

Section 10. Repeal of Conflicting Ordinances. All ordinances and parts of ordinances in conflict herewith shall be and the same are hereby repealed.

Section 11. Severability. If any section, subsection, sentence, clause or provision of this ordinance is held invalid, the remainder of the ordinance shall not be affected.

Section 12. Effective Date. This ordinance shall take effect in accordance with law, and the Charter of the Town of Longboat Key.

Passed on first reading this 7<sup>th</sup> day of March,  
1973.

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Passed and adopted finally on second reading this 21<sup>st</sup>  
day of March, 1973.

Samuel G. Gibson  
Mayor

Attest:

William M. Hager  
Town Auditor and Clerk

I HEREBY CERTIFY that the foregoing ordinance was published in accordance with the Charter and Ordinances of the Town of Longboat Key and has been posted in at least three (3) public places for a period of four (4) weeks after the passage thereof, on this 20<sup>th</sup> day of April, 1973.

William M. Hager  
Town Auditor and Clerk

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STANDARDS FOR WASTEWATER COLLECTION SYSTEMTOWN OF LONGBOAT KEY

December 1, 1972

1. PRELIMINARY REPORT

Prior to the preparation of construction drawings, the design engineer shall submit a preliminary report to the Town of Longboat Key establishing the elements of the proposed engineering design. The report shall contain at least the following information:

- A. A map of the proposed wastewater collection system, showing its location and relationship to the existing system, or any other system that might be affected by the proposed construction.
- B. Pipe sizes and approximate lengths.
- C. Manhole locations.
- D. Lift station locations and capacities.
- E. Design criteria, including:
  - (1) Lots or tracts to be served.
  - (2) Population designed to be served, immediate and ultimate.
  - (3) Hydraulic computations justifying pipe sizes larger than 8" in diameter.
  - (4) Location and method of connection to the existing system.

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This submittal is intended to inform the Town of Longboat Key of all aspects of the engineering design and assist in planning for the future. The preliminary report will be reviewed by the Town Engineer and returned with approval or appropriate comments within 15 days.

2. CONSTRUCTION DRAWINGS

Construction drawings shall comply with the preliminary report and shall show the following minimum information:

- A. Plan and profile of gravity collection and force main systems. The scale shall be 40' = 1" horizontal and 2' = 1" vertical unless otherwise approved by the Town Engineer.
- B. Existing ground surface profiles and proposed graded profile where changes in the elevation of the land surface are anticipated.
- C. A statement of the hydraulic conditions under which lift stations are to operate and a system head curve for each lift station. Lift stations shall follow the Town's standard designs.
- D. Plans for the wastewater system shall not be combined with the water system or any other system. However, such other systems and facilities, such as storm drainage, in the vicinity of the wastewater system shall be indicated in an appropriate form.

All construction drawings shall be done in ink on 24" x 36" mylar reproducible materials provided by the Town of Longboat Key and imprinted with their title block. Each drawing shall provide space for the name, address, registration number, signature and seal of the registered engineer preparing the drawings, and for the name and signature of the approving official of the Town of Longboat Key.

Final approval and acceptance at the completion of the project shall be contingent upon the following:

- A. Certification by the design engineer that the wastewater collection system has been completed in accordance with the plans and specifications.
- B. Delivery to the Town of Longboat Key of the original mylar reproducible drawing, showing completed construction and with certification by the design engineer that they are "as-built" drawings.

All original drawings of constructed wastewater collection systems shall remain the property of the Town of Longboat Key and the information they contain shall be available for planning for future construction.

3. DESIGN CRITERIA

The following design criteria shall govern all public wastewater collection systems. A "public wastewater collection system" is defined as a system which can serve 25 or more

persons. All such systems shall become the property of the Town of Longboat Key, together with rights-of-way or easements (minimum 10' each side of main) necessary for the operation and maintenance of the system. Mains shall be generally located along the streets and drives for ready access.

A. Material:

Pipe materials shall conform to ASTM Specification (latest revision) for clay pipe, using pre-molded plastic compression joints.

Force mains shall be ductile iron or cast iron manufactured in conformance with the latest standards of the American Water Works Association. The pipe shall be suitably protected against corrosion with polyethylene wrapping or other approved method. Pipe joints shall be push-on type or mechanical.

Lift stations which are intended to become a permanent part of the wastewater collection system shall be as follows:

1. Stations with a design capacity of 200 gallons per minute or less shall have submersible pumps as manufactured by the Hydr-O-Matic Pump Company or approved equivalent.

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2. Stations with a design capacity greater than 200 gallons per minute shall be of the wet well/dry well type as manufactured by the Gorman-Rupp Company or approved equivalent.

The design for lift stations and force mains shall be governed by the latest edition of "Recommended Standards for Sewage Works", a report of the Committee of the Great Lakes-Upper Missouri River Board of State Sanitary Engineers, commonly referred to as the "Ten State Standards," Chapter 30, Pages 30 - 37 inclusive is hereby adopted by reference and three or more copies which are on file with the Town Auditor and Clerk, identified as official copies, shall be kept available for public use, inspection and examination, and the same are adopted by reference as authorized by Section 165.191, Florida Statutes.

Manholes shall conform to the Town of Longboat Key "Standard Precast Concrete Manholes." See drawing attached. Bituminous fiber pipe shall not be allowed for any purposes, including house connections.

4. SYSTEM DESIGN

Extension of wastewater systems must be provided to adjacent properties when, in the judgment of the Town of Longboat Key, it will assist in providing better collection, operation and

maintenance of the system.

The Town of Longboat Key reserves the right to specify materials, methods of construction and locations of facilities when, in their judgment, it will provide for improved long-range operation of the system.

5. REVIEW PROCEDURES

The Town Engineer shall review the design engineer's plans and specifications, not only as to the foregoing provisions, but also for conformance to established good practices for wastewater system design, which shall include provisions for inspections and test requirements.

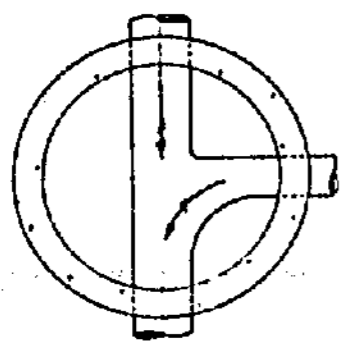
6. INSPECTION

The Town shall provide an inspector, full-time or part-time as deemed appropriate by the Town, unless the Town waives this requirement in favor of other appropriate inspection. The cost of the Town's inspector, as determined by the Town, shall be borne by the contractor.

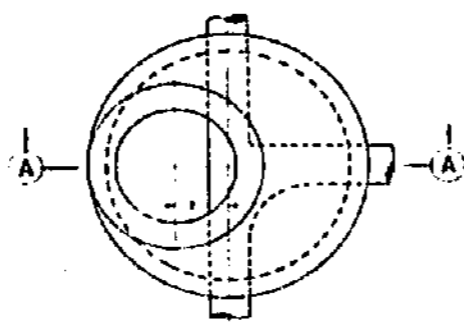
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**GENERAL SPECIFICATIONS**

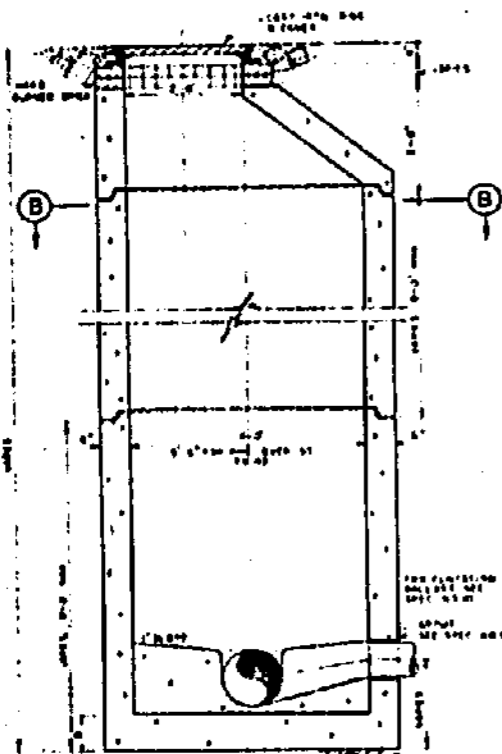
1. MANHOLES SHALL COMPLY WITH ASTM SPECIFICATION C 400, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS"
2. CEMENT SHALL BE TYPE "I"
3. CONCRETE SHALL BE 4000 PSI/28 DAY MINIMUM STRENGTH
4. HEAVY DUTY MANHOLE RING IS 18" HIGH AND THE COVER SHALL BE TYPE B 2005 NO. 241, WITH FRAME (2700 LBS) AND COVER (1370 LBS), WITH BLIND PUGHOLE, AS MANUFACTURED BY US POLYMER CORP., MIAMI, FLA., OR APPROVED EQUAL
5. REINFORCING PER ASTM SPEC. C-400, LATEST REV.
6. MORTAR SHALL BE 2 PARTS CLEAN SAND AND 1 PART CEMENT WITH NO MORE THAN 10% PART HYDRATED LIME
7. JOINTS SHALL BE FULL AND STRUCK FLUSH
8. NO STEPS SHALL BE USED
9. IMMEDIATELY FILL SPACE BETWEEN RINGS AND MANHOLE WALL WITH CEMENT MORTAR AFTER PIPE IS SET, PER ENR 402B CEMENT
10. FOR 48" MANHOLE, DEPTH GREATER THAN 15', ADDITIONAL FLOTATION BALLAST CONCRETE SHALL BE PROVIDED IN BOTTOM OF EACH UNDER PIPE BY RATE OF 1 CUM YD CONCRETE FOR EACH ADDITIONAL FEET OF MANHOLE DEPTH. BALLAST SHALL BE INSTALLED WHILE EXCAVATION IS DRY



SECTION "B-B" & "D-D"

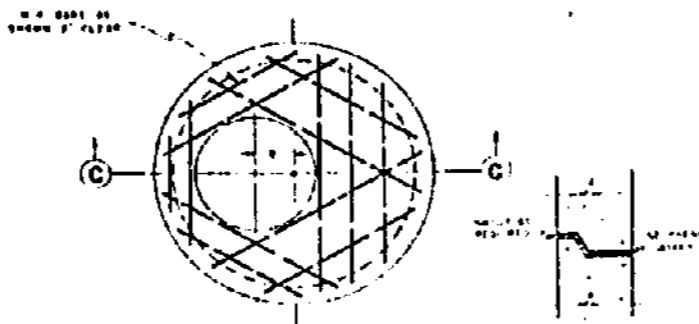


PLAN-OVER 5'-0"



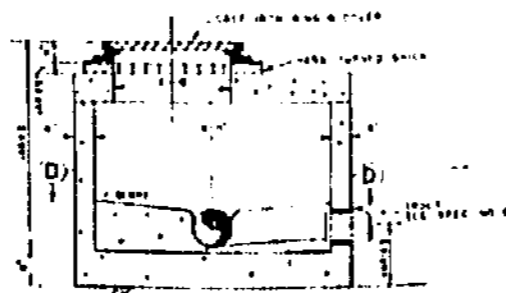
SECTION "A-A"

FOR DEPTHS OVER 5'-0"



PLAN-5'-0" & UNDER

JOINT DETAIL



SECTION "C-C"

FOR DEPTHS 5'-0" & UNDER

TOWN OF LONGBOAT KEY  
 STANDARD PRECAST CONCRETE  
 MANHOLES  
 73-4  
 SMALLY, WELLFORD & NALVEN - CONSULTING ENGINEERS - SARASOTA, FLA.