

ORDINANCE NO. 91-O-484

AN ORDINANCE ADOPTING "GENERAL ENGINEERING REQUIREMENTS AND STANDARD SPECIFICATIONS FOR STREET, STORM DRAIN, SEWER AND WATERLINE CONSTRUCTION", DATED AUGUST, 1988, PROJECT NO. 3683, PREPARED BY H.G.E. ENGINEERS AND PLANNERS; REPEALING ORDINANCES NO. 78-O-293, 89-O-447, 89-O-451, 90-O-447.B, 90-O-447.C; AND DECLARING AN EMERGENCY.

Sections:

- SECTION 1. ADOPTION OF "GENERAL ENGINEERING REQUIREMENTS AND STANDARD SPECIFICATIONS FOR STREET, STORM DRAIN, SEWER AND WATERLINE CONSTRUCTION".**
- SECTION 2. AMENDMENT OF DIVISION 3, SITEWORK, 3H, 3I, 3Q.**
- SECTION 3. AMENDMENT OF DIVISION 4, STANDARD DETAILS.**
- SECTION 4. AMENDMENT OF DIVISION 3, SITEWORK 3N.02.**
- SECTION 5. REPEAL OF ORDINANCES NO. 78-O-293, 89-O-447, 89-O-451, 90-O-447.B, 90-O-447.C.**
- SECTION 6. EMERGENCY CLAUSE.**

The city of Brookings ordains as follows:

SECTION 1. ADOPTION OF "GENERAL ENGINEERING REQUIREMENTS AND STANDARD SPECIFICATIONS FOR STREET, STORM DRAIN, SEWER AND WATERLINE CONSTRUCTION". The "General Engineering Requirements and Standard Specifications for Street, Storm Drain, Sewer and Waterline Construction", dated August, 1988, Project No. 3683, Prepared by H.G.E. Engineers and Planners, is hereby adopted.

SECTION 2. AMENDMENT OF DIVISION 3, SITEWORK, 3H, 3I, 3Q. Division 3, Sitework, 3H, 3I, 3Q of the "General Engineering Requirements and Standards Specifications for Street, Storm Drain, Sewer and Waterline Construction", dated August, 1988, Project No. 3683, prepared by H.G.E. Engineers and Planners, adopted in Section 1 above, are hereby amended as follows:

1. Division 3, Sitework, 3H.02.c.(02)(e)(aa) shall be amended to read:

(aa) Provide sand collars at all manhole connections to form a watertight seal at the manhole, using non-shrink grout and concrete bonding agent.

2. Division 3, Sitework, 3H.02.c.(02)(e)(bb) shall be amended to read:

(bb) Sand collars shall be furnished by the manufacturer. Field-fabricated collars or waterstops will not be allowed.

3. Division 3, Sitework, 3H.04.b.(04) shall be amended to read:

(04) Immediately following pipe cleaning, the pipe installation shall be tested with low pressure air. Air shall be slowly supplied to the plugged pipe installation until internal air pressure reaches 4.00 pound per square inch greater than the average back pressure of ground water that may submerge the pipe. At least two minutes shall be allowed for temperature stabilization before proceeding.

4. Division 3, Sitework, 3H.04.b.(05) shall be amended to read:

(05) The pipeline shall be considered satisfactory if the time required in seconds for pressure to decrease from 4.0 to 3.5 pounds per square inch greater than the average back pressure of any ground water that may submerge pipe is not less than that computed according to Uni-Bell Standards, latest edition, and to the following table entitled "Duration for Air Test Pressure Drop". Duration of test shall be as computed from the table, using length "L" in feet, but not less than "Minimum Time" listed in the Table.

5. Division 3, Sitework, 3H.04.b.(06) shall be amended to read:

- (06) If installation fails requirements, Contractor shall determine source or sources of leakage, and he shall repair or replace all defective materials or workmanship. Completed pipe installation shall meet requirements of this test, before being considered acceptable.

**TABLE 62
DURATION FOR AIR TEST PRESSURE DROP**

Pipe Size Inches	mm.	Duration (Seconds)	Minimum Time (Minutes)
4	100	0.190 L	2
6	150	0.427 L	3
8	200	0.760 L	4
10	225	1.187 L	5
12	305	1.709 L	6
15	380	2.671 L	7

Larger Diameters - See latest Uni-Bell Standards

6. Division 3, Sitework, 3I.03.c. shall be amended to read:

- c. Finished manhole shall be watertight. All manholes shall be hydrostatically tested in accordance with Oregon A.P.W.A. standards, except that all manholes shall be filled to the rim. Manhole shall be judged watertight if testing complies with standards specified.

7. Division 3, Sitework, 3Q.02.c. shall be amended to read:

- c. A combination base and leveling course material is approved for 1"-0 crushed rock.

8. Division 3, Sitework, 3Q.02.d. shall be amended to read:
- b. Base and leveling course material shall conform to the requirements of Section 703.07 of the Oregon Department of Transportation, Highway Division, Standard Specifications, except 70 percent of the particles by weight shall have at least one mechanically fractured face based on grading requirements of the section. Furthermore, the fracture requirements shall be applicable uniformly throughout the grading of the materials involved. (All gravel sizing shall have fractured faces applicable by screen sizes to the 70% level.) The material shall be tested and tests shall be furnished to the City of Brookings showing conformance thereto on each of the gradations to which the materials are divided in determining conformance to the requirements for grading of the materials. Testing for each proposed pit shall be furnished to the City on an annual basis, and at more frequent intervals at the discretion of the City Engineer if there is any question regarding the quality of rock being furnished for City purposes.

SECTION 3. AMENDMENT OF DIVISION 4, STANDARD DETAILS. Division 4, Standard Details, of the "General Engineering Requirements and Standards Specifications for Street, Storm Drain, Sewer and Waterline Construction", dated August, 1988, Project No. 3683, prepared by H.G.E. Engineers and Planners, are hereby amended as follows:

- A. Division 4, Standard Details, shall be amended to add Standard Detail 4-1-A, Curb and Gutter Section.

SECTION 4. AMENDMENT OF DIVISION 3, SITEWORK 3N.02. Division 3, Sitework, 3N.02, of the "General Engineering Requirements and Standard Specifications for Street, Storm Drain, Sewer and Waterline Construction", dated August, 1988, Project No. 3683, prepared by H.G.E. Engineers and Planners, is hereby amended as follows:

Division 3 - Sitework**3N. Culvert Installation****02. Materials.****a. Corrugated Metal Pipe.**

- (01) Corrugated metal pipe shall be helical corrugated, Armco "Hel-Cor Aluminized Steel, Type 2", or approved equal, conforming to AASHTO M36, Type 2.**
- (02) Aluminum pipe is approved equal. Kaiser "Corlix" Storm Sewer Pipe, conforming to AASHTO M 196, current edition.**
- (03) Corrugated metal pipe shall be nominal inside diameters of 12 inches, minimum. Pipe shall be 14 gauge minimum.**
- (04) Joints shall be made with connecting bands fabricated from same material as pipe. Connecting bands shall be ten and one half (10-1/2) inches wide for steel, twelve (12) inches wide for aluminum.**

SECTION 5. REPEAL OF ORDINANCES NO. 78-O-293, 89-O-447, 89-O-451, 90-O-447.B, 90-O-447.C. Ordinances No. 78-O-293, 89-O-447, 89-O-451, 90-O-447.B, and 90-O-447.C are hereby repealed in their entirety.

SECTION 6. EMERGENCY CLAUSE.

[Effective December 9, 1991]