

MINDEN-GARDNERVILLE
SANITATION DISTRICT



CODE

Updated and revised

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PART ONE

CHAPTER I

GENERAL PROVISIONS & DEFINITIONS

1.010 Minden Gardnerville Sanitation District Code: Title; citation; reference.

1. These bylaws shall be known as the Minden Gardnerville Sanitation District Code and it is sufficient to:

a. Refer to the Code as the Minden Gardnerville Sanitation District Code in any prosecution for the violation of any provision thereof or in any legal proceeding.

b. Designate any rule, order or ordinance adding to, amending, correcting or repealing all or any part or portion thereof as an addition to, amendment to, correction or repeal of the Minden Gardnerville Sanitation District Code.

2. Further reference may be had to the chapters, sections and subsections of the Minden Gardnerville Sanitation District Code, and such references shall apply to that numbered chapter, section or subsection as it appears in the Code.

3. This Ordinance and any of the Code Sections or Subsections set forth herein may be revised, amended or repealed pursuant to applicable law.

1.020 Definitions. As used in the Minden Gardnerville Sanitation District Code, unless the context otherwise requires, the words and terms defined in sections 1.030 to 1.180, inclusive, have the meanings ascribed to them in those sections.

1.030 Applicant. The person making application for service who shall be the owner of the premises, or its authorized agent, to be served or a person who renders such service to its customers.

1.040 Application. The District requires written request for sewer service as distinguished from an inquiry as to the availability or charges for such service. Application is the written or printed form of Application as approved by the Board from time to time.

1.050 Average Month. Thirty (30) days.

1.060 Billing Period. Quarterly with the charge computed on a monthly rate.

- 1.070 **BOD.** (Denoting Biochemical Oxygen Demand) means the quantity of oxygen utilized in the bio-chemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20 C, expressed in milligrams per liter.
- 1.080 **"Board".** The Board of Trustees of the Minden-Gardnerville Sanitation District.
- 1.090 **Building.** Any structure used for human habitation or a place of business, recreation or other purposes containing sanitary facilities.
- 1.100 **Building Drain.** That part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer. The "Building Drain" shall be deemed to commence five (5) feet from the point the piping leaves the outside face of the building wall.
- 1.110 **Collection System.** The system of pipes, manholes, pump stations and appurtenances receiving liquid wastes from buildings and premises for the transmission to the treatment facility.
- 1.120 **Combined Sewer.** A sewer receiving both surface runoff and sewage and is not permitted in the Minden Gardnerville Sanitation District.
- 1.130 **Contractor.** An individual, firm, corporation, partnership or association licensed as a contractor by the State of Nevada.
- 1.140 **County.** The County of Douglas.
- 1.150 **Customer.** The person in whose name service is rendered as evidenced by the signature on the application or contract for that service, or in the absence of a signed instrument, by the receipt and payment of bills regularly issued in his name regardless of the identity of the actual user of this service.
- 1.160 **Date of Presentation.** The date upon which a bill or notice is mailed or postmarked or delivered to the Customer by the District.
- 1.170 **District.** The Minden-Gardnerville Sanitation District acting through its duly authorized officers or employees within the scope of their respective duties.
- 1.180 **District Engineer.** The engineer appointed by the Board of Trustees. The appointee shall be a registered civil engineer in Nevada. The District Engineer may also be the District Manager.
- 1.190 **EDU.** Equivalent Dwelling Units of the estimated quantity of sewage as determined by the District in its discretion from time to time which the sewer system must handle for the specific use compared to the usage of an average single family dwelling which has a defined usage of units.

- 1.200 **Fixtures**. Any sink, tub, shower, water closet or other facility or equipment connected by drain to the sewer.
- 1.210 **Gallon**. The volume of sewage which occupies two hundred thirty-one (231) cubic inches.
- 1.220 **Gaming Areas**. Any area where there are four or more slot machines or any other form of gaming.
- 1.230 **Garbage**. Solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of produce or any other solid waste or refuse.
- 1.240 **Industrial Wastes**. The liquid wastes from industrial manufacturing processes, trade or business as distinct from sanitary sewage.
- 1.250 **Law**. Statute, ordinance, rule or regulation established and enforced by Federal, State, County or Municipal authorities, or common law of the State.
- 1.260 **Main Sewer**. A public sewer designed to accommodate more than one building sewer.
- 1.270 **Meetings**. An official duly noticed meeting of the District Trustees. Regular monthly meetings shall be held on the first Tuesday of the month. When the first Tuesday is a holiday, the meeting will be held on the first Thursday.
- 1.280 **Natural Outlet**. Any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.
- 1.290 **Outlet**. Any part of a plumbing system to which a fixture is attached.
- 1.300 **Outside Sewer**. A sanitary sewer beyond the limits of the District's service territory or boundaries and which are not subject to the control of the District.
- 1.310 **Owner**. Fee owner or owners of the premises.
- 1.320 **Permanent Service**. Service which, in the opinion of the District, is of a permanent and established character. The use of the sewer may be continuous, intermittent or seasonal in nature.
- 1.330 **Permits and Fees**. Those charges and permits of authorizations required by the District for sewer service.
- 1.340 **Person**. Any human being, individual, firm, company, partnership, association, private, public or municipal corporation, the United States of America, the State of Nevada, a district and any political subdivision or governmental agency, a general improvement district, local improvement district or other quasi/municipal corporation.

- 1.350 **pH.** The negative logarithm of the hydrogen ion activity.
- 1.360 **Plumbing System.** All plumbing fixtures and traps or soil, waste, special waste and vent pipes, and all sanitary sewer pipes within a building and shall be deemed to extend to five (5) feet from the point the piping leaves the outside face of the building wall (see "Building Drain").
- 1.370 **Premises.** All of the real property and services to a single integrated activity operating under one name to one or more buildings, locations, or services, provided (a) such building, location or services are to a single legal unit of property; or, (b) such two (2) or more legal units of property immediately adjoining, except for intervening public highways, streets, alleys or waterways.
- 1.380 **Properly Managed Garbage.** The wastes from the preparation, cooking and dispensing of food that has been reduced 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 inch in any dimension and containing no grease.
- 1.390 **Public Sewer.** The sanitary sewage piping and appurtenances located in a public right-of-way or public or private easement, and is utilized for the collection and/or conveyance of sewage discharged from individual building laterals.
- 1.400 **Sanitary Sewer.** A sewer which carries sewage and to which storm, surface and ground waters are not intentionally admitted.
- 1.410 **Secretary.** The Secretary of the District.
- 1.420 **Service Classification.**
- (1) **Residential Service:** service to single family dwellings, condominiums, individually owned mobile homes, attached multiple residential units, dormitories and rooming houses, hotels and motels.
- (2) **Commercial Service:** service to laundromats, theaters, stores, offices, general private and public businesses, gaming establishments and other public or amusement areas.
- (3) **Institutional Service:** service to schools, churches, lodges, halls and hospitals.
- (4) **Industrial and Other Special Uses:** service to special users not contemplated hereinabove based on the character or the waste, quantity and quality of the flow or the other unique installation or operating circumstances.
- 1.430 **Service Connection.** The point of connection of the customer's piping with the District's facilities.

- 1.440 **Sewage.** A combination of the water-carried wastes from the residences, business buildings, institutions and industrial establishments.
- 1.450 **Sewage Treatment Plant.** Any arrangement of devices and structures used for treating sewage.
- 1.460 **Sewer.** A pipe or conduit for carrying sewage.
- 1.470 **Sewage Works.** All facilities for collecting, pumping, treatment and disposing of sewage.
- 1.480 **Shall.** Shall is mandatory; will is permissive.
- 1.490 **Single Family Unit.** A single family unit is defined as and refers to the place of residence for a single family. Property improved for multi-family purposes shall consist of the number of single family units in the multi-family structure or facility. It shall mean any residence, apartment, habitation or other structure, including a mobile home or trailer to be occupied by a single person or family requiring sewage disposal service.
- 1.500 **Slug.** Any discharge of water, sewage or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for a duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration of flows during normal operation. Slugs are not permitted to be discharged.
- 1.510 **Storm Drain or Storm Sewer.** A sewer which carries storm, surface or ground waters and drainage, but excludes sewage and polluted industrial wastes.
- 1.520 **Street.** Any public highway, road, street, avenue way, public place, public easement or right-of-way.
- 1.530 **District Manager.** The person appointed by the Board to superintend the sewage works and perform the work of the inspector and supervise the District Office.
- 1.540 **Suspended Solids.** Solids that either float on the surface or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.
- 1.550 **Tariff Schedules.** The entire body of effective rates, charges and rules collectively of the District as set forth herein.
- 1.560 **Unit.** EDU as herein defined.
- 1.570 **Watercourse.** A channel in which a flow of water occurs, either continuously or intermittently.

CHAPTER 2

ASSESSING BUSINESS IMPACT ON ENACTMENT OF AMENDMENT OR REPEAL OF ORDINANCES

2.010 **Definitions.** As used in this Chapter

1. “Rule” means:
 - (a) An ordinance or rule by the adoption of which the District exercises legislative powers; and
 - (b) An action taken by the District that imposes, increases or changes the basis for the calculation of a fee that is paid in whole or in substantial part by businesses.
2. “Rule” does not include:
 - (a) An action taken by the District that imposes, increases or changes the basis for the calculation of:
 - (1) Special assessments imposed pursuant to chapter 271 of NRS;
 - (2) Impact fees imposed pursuant to chapter 278B of NRS;
 - (3) Fees for remediation imposed pursuant to chapter 540A of NRS;
 - (4) Taxes ad valorem;
 - (5) Sales and use taxes; or
 - (6) A fee that has been negotiated pursuant to a contract between a business and the District.
 - (b) An action taken by the District that approves, amends or augments the annual budget of the District.
 - (c) An ordinance or rule adopted by the District pursuant to a provision of Chapter 271, 278, 278A, 278B or 350 of NRS.

(d) An ordinance or rule adopted by or action taken by the District that authorizes or relates to the issuance of bonds or other evidence of debt of the District. (1999, ch. 443, § 11.5, p. 2072; 2001, c. 150, § 3, p. 755.)

2.020

Prerequisites to Adoption of Proposed Rule.

1. Before adopting a proposed rule, the District Manager and his staff shall determine whether the proposed rule is likely to:

(a) Impose a direct and significant economic burden upon a business; or

(b) Directly restrict the formation, operation or expansion of a business.

2. If the District Manager and staff determine that the rule will not have either or both of the effects set forth in Section 1, it shall prepare and submit at the meeting to consider this proposed rule and prior to the adoption thereof, a form in substantial conformity with the form set forth in Exhibit A to this chapter.

3. If the District Manager and staff determine pursuant to subsection 1 that a proposed rule is likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation or expansion of a business the District Manager and his staff shall

(a) Insofar as practicable, consult with at least 3 trade associations or owners and officers of businesses that are likely to be affected by the proposed rule, and

(b) Consider methods to reduce the impact of the proposed rule on such businesses, including, without limitation:

- (1) Simplifying the proposed rule;
- (2) Establishing different standards of compliance; and
- (3) Modifying a fee or fine set forth in the rule so that a business is authorized to pay a lower fee or fine.

4. If the District Manager and staff determine that the proposed rule will have one or both of the effects set forth in Section 1, then the District Manager and staff shall prepare a business impact statement in substantial conformity with requirements of 2.020 and make copies of the statement available to any interested person before holding a hearing to adopt the rule. The Agenda and Public Notice of the meeting shall contain a statement of the location where the business impact statement may be reviewed, and notice of rights of appeal in substantial conformity with the notice set forth in Exhibit C to this chapter.

2.030 Contents of Business Impact Statement.

The business impact statement prepared pursuant to 2.020(4) must set forth the following information:

1. A description of the manner in which comment was solicited from affected businesses, a brief summary of their responses and an explanation of the manner in which other interested persons may obtain a copy of the summary.
2. The estimated economic effect of the proposed rule on the businesses which it impacts, including, without limitation:
 - (a) Both adverse and beneficial effects; and
 - (b) Both direct and indirect effects.

3. A description of the methods considered to reduce the impact of the proposed rule on impacted businesses and whether any method or proposal was actually incorporated in the final proposed rule.
4. The estimated cost to the District for enforcement of the proposed rule.
5. If the proposed rule provides a new fee or increases an existing fee, the total annual amount the District expects to collect and the manner in which the money will be used.
6. If the proposed rule includes provisions which duplicate or are more stringent than federal, state or local standards regulating the same activity, an explanation of why such duplicative or more stringent provisions are necessary.
7. A business impact statement shall be prepared in substantial compliance with Exhibit B to this Chapter and submitted at the meeting to consider adoption of the rule.

2.040

Objection to Adopted Rule: Petition: Procedure.

1. A business that is aggrieved by a rule adopted by the District may object to all or a part of the rule by filing a petition with the District within 30 days after the date on which the rule was adopted.
2. A petition failed pursuant to subsection 1 may be based on the following grounds:
 - (a) The District failed to prepare a business impact statement, or
 - (b) The business impact settlement prepared by the District did not consider or significantly underestimated the economic effect of the rule on businesses.

3. After receiving a petition pursuant to subsection 1, the District shall determine pursuant to subsection 4 whether the petition has merit. If the District determines that the petition has merit, it shall take action to amend the rule to which the business objected.

4. The petition filed by an aggrieved business must be received by the District at its business office not later than 30 days after the adoption of the rule. After receiving the petition, the District Manager shall schedule the petition to be heard at the next regular scheduled meeting of the board as to which notice has not yet been published.

2.050 Adoption of Rule During Emergency.

The District may adopt a rule without complying with the provisions of 2.020 or 2.040 inclusive, of this chapter if the District declares, by unanimous vote, that emergency action is necessary to protect public health and safety. Such a rule may remain in effect for not more than 6 months after the date on which it is adopted.

EXHIBIT B - TO CHAPTER 2
BUSINESS IMPACT STATEMENT

This statement is prepared by Minden-Gardnerville Sanitation District (MGSD) with respect to a proposed rule for which a Business impact analysis is required. This rule deals with _____ (insert description of the rule)

1. Comment was solicited from trade associations or business owners through the following: _____ (insert description of comment solicitation methods and attach copies of summaries of comment received).

Other interested persons may obtain a copy of the summary comment by receiving a copy of this Business Impact Statement from: The office at MGSD including name, address and telephone number

2. The estimated economic effect of the proposed rule

on the business which it is to regulate is: (a) adverse and beneficial effects - _____ (briefly describe)

and (b) direct and indirect effects - _____ (briefly describe)

3. The District considered the following methods to reduce the impact of the proposed rule: _____
_____ (description of mitigation methods considered)

The District (did or did not) use any of the methods described in this paragraph.

4. The estimated cost to the District for the enforcement of the proposed rule is: _____

(calculation of cost and total cost of enforcement)

5. If the proposed rule establishes a new fee or increases an existing fee, the District estimates that it will receive the following amount of additional revenue on an annual basis: (description of use or uses to which the revenue will be put)

6. The proposed rule (will or will not) adopt standards duplicative or more stringent than federal or state standards regulating the same activity. If the proposed rule adopts standards which duplicate or are more stringent than federal or state standards, these standards are necessary because:

(description of need)

7. The proposed rule will be considered initially on _____, 20___. If the proposed rule is an ordinance, the second reading is tentatively scheduled for _____, 20__.

EXHIBIT C - TO CHAPTER 2

NOTICE

A business aggrieved by an ordinance or rule adopted by the District **and** for which a Business Impact Statement is required, may object to all or part of the rule by filing a petition with the District within thirty (30) days after the date on which the ordinance or resolution was adopted. The petition must be filed with:

Minden-Gardnerville Sanitation District
Attn: District Manager
Post Office Box 568
Minden, Nevada 89423

Petitions will be deemed to be filed on the date they are received by the District Manager rather than the date of the petition's postmark.

A petition may only be filed for the following reasons: (a) the District failed to prepare a Business Impact Statement concerning a particular proposed rule and was required to do so by the Nevada Revised Statutes; or (b) the District did not consider or significantly underestimated the economic effect of the proposed rule on businesses. The petition must state specific facts to justify either or both of the reasons cited by the petition. A petition which merely recites the general statutory grounds allowing for the filing of a petition and is unsupported by specific facts may be found to lack merit by the District.

After receipt of a petition filed in accord with the two preceding paragraphs, the District will determine whether the petition has merit. If the District determines that the petition has merit, the District may take action to amend the rule to which the business objected.

This notice contains the procedures for an aggrieved business to object to a rule adopted by the District and which requires the preparation of a Business Impact Statement. Copies of these procedures are available from the District Manager at the District upon request. There is no charge for a copy of the procedure.

CHAPTER 3
GENERAL DESCRIPTION OF SERVICE
& SERVICE AREA & DISTRICT BOUNDARIES

3.010 **Service Description:**

The District shall provide sewer service at the customer's service connection to meet reasonable needs and requirements of the customer and to meet the rules set forth in this ordinance and those required by the Health Division of the Human Resources Department of the State of Nevada.

3.020 **District Boundaries:**

The District boundaries shall consist of the original District boundaries as well as such other areas as may be annexed into the District from time to time pursuant to statute except for any such areas as shall be excluded from the District pursuant to statute.

3.030 **Legal Descriptions:**

A legal description of the original District boundaries as well as copies of any ordinances annexing or excluding property from the District and a legal description of all such property shall be kept and maintained in a separate volume of ordinances and open to public inspection during regular business hours.

CHAPTER 4
NOTICES

4.010 **Notice to Customers**

1. In Writing

Notice to a customer will normally be in writing and will be delivered or mailed to the customer's last known address.

2. Exception

In emergencies, or when circumstances warrant, the District, where feasible, will endeavor to promptly notify the customer affected and make such notification either in person or by telephone, and this notification will be followed by a letter.

4.020 **Notice from Customers**

1. In Writing

A customer shall make notification in writing to the District at its administrative office at the Sewer Plant on U.S. Hwy. 395, P.O. Box 568, Minden, Nevada 89423.

2. Exception

In emergencies, or when circumstances warrant, the customer may notify the District either in person or by telephone. This notification shall be followed by a letter.

CHAPTER 5
APPLICATION FOR SERVICE

5.010 **General**

Except as otherwise provided, service will be furnished only to applicants whose premises are wholly situated within the boundaries of the District. Under special circumstances, premises outside the District boundaries, but within the service territory, can be served on the basis of a contract to be negotiated between the applicant and the District. Before an application for premises outside the District can be considered, such area must first be annexed into the District pursuant to the provisions set forth in Chapter 9 of this Code. Under special circumstances, premises outside the District boundaries but inside its service territory can be served on the basis of a contract to be negotiated between the applicant and the District.

5.020 **Application**

Each applicant shall be required to apply for a Sewer Connection Permit on a form provided by the District. Sewer Connection Permits for single family residential applications will be issued by the District Manager upon payment of the connection fee. The property owner will certify that no property other than his or her own or public property will be crossed, or an easement in a form suitable to the District's engineer, legal counsel and Board must accompany the application. Applications for other classes of service will be reviewed and acted upon by the Board during its regular monthly meeting following receipt of the application. In order to be considered at a

monthly meeting, the application, together with substantiating data, must be received by the District office at least fifteen (15) days prior to the regular monthly meeting which is held on the first Tuesday of each month. The application shall include information concerning the type of service, the purpose and the type of facilities to be served and:

1. Date of application;
2. Location of premises to be served, including a plot plan and other pertinent information;
3. Whether the premises have been previously supplied with sewer service by the District;
4. Location and depth of public sewer at the proposed service connection;
5. Plan and profile of proposed building sewer and materials to be used;
6. Sufficient data that will enable the District to verify conformance with the District's standards;
7. Address to which bills are to be mailed;
8. Whether the applicant is owner or agent for owner;
9. The property owner will certify that no property other than his or her own or public property will be crossed in order to have access to the sewer. If other properties must be crossed, a twenty (20) foot easement in a form suitable to the District's engineer, legal counsel and Board must accompany the application;

10. The owner must agree to maintain the private sewer in accordance with the provisions of the District ordinances and will pay any costs incurred by the District in correcting the deficiencies in the private sewer line.

5.030 Special Meetings

Should the applicant desire a special meeting other than the regular District meeting, there will be a Two Hundred Fifty Dollar (\$250.00) charge, payable in advance, for each item placed on the Agenda by the applicant, if the District trustees elect to hold such a meeting.

CHAPTER 6
RATES AND CHARGES

6.010 Monthly Rates

1. A monthly per-unit charge, as further defined, shall be made for the discharge of, and the availability for the discharge of, all sewage into the District's sewer system. The per unit charge shall be in such amounts as is set forth in schedules established by the District, and as revised from time to time in accordance with other provisions of these ordinances and applicable law. The total monthly charge will be computed based on the summation of the units of the user in accordance with the following schedule times the then current monthly per unit charge established by the District. Units are defined as the estimated quantity of sewage which the sewer system must handle for the specific use compared to the usage of an average single family dwelling which has a defined usage of unity. Where lift pumps operated by the District are used to serve a user, an additional charge/per sewer unit computed by the following formula will be charged:

$$\begin{array}{r} \$1.00 \times \left[\frac{\text{Potential Connections}}{\text{Actual Connections} \times 1.2} \right] \times \left[\frac{\text{Total Pumping Head}}{10} \right] \\ \text{(above ratio to be not less than 1)} \end{array}$$

The above charge will be recomputed once per year. All charges under this Chapter 6 shall be computed by the category or categories which the District in its discretion, deems to be most applicable to the business, type of business, or use or application involved, except in the

case of Section 6.030(5) which shall be applicable to and/or in addition to any and all other categories which pertain to rates and charges.

6.020 Residential Use

(1) Single family dwellings, condominiums per single family, single mobile homes and attached multiple residential rental units using common building sewer.

(2) Mobile home parks per stall or pad. The permanent residence of the manager or owners shall be included as a stall or pad. A Mobile Home Park is defined as a facility primarily used for parking mobile homes as defined in NRS 482.067 and NRS 489.120, manufactured homes as defined by NRS 489.113, or for parking other recreational vehicles that are being used as long-term or permanent dwellings.

(3) Dormitories and rooming houses.

(4) Hotels and motels with the exception that the permanent residence of Mgr. or owner will be treated as a single family residence.

6.030 Commercial

(1) Laundromats.

(2) Restaurants, all prepared food establishments, bars, cocktail lounges and taverns.

Equivalent Dwelling Unit

1.0 unit per single family dwelling family unit.

1.0 units per stall or pad.

0.25 units per sleeping room.

1/3 units per sleeping room for up to and including a combined total of 3 drains or fixtures and 0.1 units for each and every additional drain or fixture.

0.5 units per machine.

0.5 units per drain, all kitchen drains and general public use drains. Where the establishment is open more than 12 hrs./day, 0.6 units per drain, and if no dishes are used, the 0.5 will be reduced to 0.3 units when open less than 12 hrs./day and 0.4 when open more than 12 hrs./day.

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| <p>(3) Stores, offices, general private and public businesses. Each business containing a minimum of one (1) unit. Multiple businesses in one building sharing a common restroom shall be considered as one business for the purpose of calculating one applicable sewer unit.</p> | <p>0.2 units per drain, per 9 hour shift for drains not available to the general public. 0.3 units per drain, per 9 hour shift for drains available to the general public. Where the establishment's hours of operation exceed one 9 hour shift, the number of units allocated per drain will be increased by a factor of .125 for each hour in excess of 9 hours.</p> |
| <p>(4) Gaming establishments, or gaming areas within other use buildings.</p> | <p>1.0 unit per 500 sq. ft. (but not less than one (1) unit).</p> |
| <p>(5) Special drains:</p> | |
| <p>(a) If any grease, excess cleaning agents or other agents not common to normal sewerage are discharged;</p> | <p>0.5 units.</p> |
| <p>(b) If any cooling water drains or continuously running drains are in use;</p> | <p>1.0 unit.</p> |
| <p>(c) For any public dump station for recreational vehicles only. For any R.V. Park having individual parking for unserviced spaces, an additional unit will be charged for one to six (1-6) spaces, two (2) units for seven to twelve (7-12) spaces and three (3) units for thirteen to eighteen (13-18) spaces, etc.;</p> | <p>Five (5) units per drain.</p> |
| <p>(d) For garbage disposal, not in a residence;</p> | <p>1.0 unit.</p> |
| <p>(e) Heavy use drains serviced by more than 1 supply or 1 supply greater than 3/4" of water line;</p> | <p>0.2 units times number of water services to drain or its equivalent.</p> |

(f) R.V. Parks are defined as facilities used to temporarily park Travel Trailers as defined in NRS 482.127 or to temporarily park Motor Homes as defined in NRS 482.071. Facilities for parking Mobile Homes as defined in NRS 482.067 and NRS 489.120, or manufactured homes pursuant to NRS 489.113 are not considered to be R.V. Parks, but are mobile home parks pursuant to Section V.A3a(2) of these Ordinances. Stalls or pads on which travel trailers or motor homes are parked or stored for a period in excess of sixty (60) days shall be deemed to be mobile home stalls or pads and shall be subject to the rates and charges applicable to such under V.A3a(2).

.50 units per stall or pad.

(g) Swimming pools. In addition to the number of units for sanitary facilities and drains, a charge of 1 EDU for each 350 gallons of water used for backwashing the pool filters will be charged. The District will assess the maximum backwash flow based on information submitted by the applicant. The District will periodically monitor the pool operation and any changes noted may result in the charge for backwashing being modified to represent the actual operating conditions. A minimum of 1 unit for backwashing per pool will be assessed;

(h) Self service car washes.

1.5 units/stall.

(i) Supermarket condensate drains.

.05 units per drain.

(j) Dumpster Pad Drain

.3 units per drain

6.040 Institutional

- | | |
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| (1) Schools, first ADA after first month of school year and adjusted annually. | 1.0 unit per 16 ADA pupils. |
| (2) Churches. | 1.0 unit per 6,000 sq. ft. of worship area and 1.0 unit per 1,500 sq. ft. for all other areas. |
| (3) Lodges, halls, theaters, meeting rooms, amusement areas other than gambling. | 1.0 unit per 2,000 sq. ft. (but not less than 1 unit). |
| (4) Hospitals. | 1.0 unit per two (2) beds. |
| (5) Assisted Care Facilities without in-room kitchen | .35 equivalent dwelling units per single occupancy |

6.050 Dump Stations

Dump stations which are not recreational vehicle dump stations shall be treated as an industrial application.

6.060 Industrial, Other Special Uses and Alternatives

For all other uses the applicant shall present all the applicable information required for the evaluation at least Fifteen (15) days' prior to a regular District meeting, and the District will determine what the rate will be after a public hearing.

In cases when the industrial usage results in particular technical problems, the rates will be negotiated by the applicant and the Board. Once an agreed price has been determined, the District will notice and hold a public hearing on the adoption and negotiated price. Upon hearing the matter, the District will either adopt or reject the negotiated rate.

A special discharge permit will be issued to industrial users specifying the quantity, quality and period of discharge.

6.070

Miscellaneous

1. In the event a private residence and a business are situate on the same premise, the following will be charged:
 - a. A charge will be assessed the residence in accordance with the rate applicable to residences.
 - b. Any drains in the residence used by the business will be charged at the commercial rate in addition to the charges in paragraph a above.
 - c. In the case of new construction, only one connection fee, computed on the larger rate, shall be payable, even though more than one common physical connection is constructed.
2. MGSD will notify each user at least annually of the rates and the portion of the user charge or ad valorem taxes which are attributable to waste-water treatment services.
3. MGSD's user charge system shall take precedence over any terms or conditions of agreements or contracts which are inconsistent with the requirements of Section 204(b)(1)(A) of the Clean Water Act and 40 CFR 35.2140.

6.080

Charges for MGSD Equipment

MGSD shall charge a fee of \$400.00 per hour for the use of any MGSD equipment, including but not limited to, Vacuum and Water Jetting equipment. Equipment may only be used by MGSD and may not be used without MGSD's express consent which is entirely discretionary with MGSD and may be withheld for any reason. Equipment use

charges will be assessed any customer whenever MGSD determines in its discretion that it is necessary to use MGSD equipment for, or on any property of customer, including laterals and grease interceptors, for the purpose of cleaning, maintaining or repairing lines or preserving reliability of MGSD facilities and/or MGSD service to customers or others. Bills for services under this Code Section will be due thirty days after invoice, and carry interest at 1% per month.

6.090 Connection and Capacity Fees

1. Where new construction within the District boundaries as they existed prior to July 1, 1978, and where no prior agreement was made as to fees, results in a sewer connection being made subsequent to the adoption of this ordinance, the lesser of the fees computed pursuant to subparagraphs a and b below will be charged:

a. A credit will be given for all sewer units presently being served by an existing sewer connection. A connection fee for sewer units in excess of the present use will be levied and based at the rate of Two Hundred Seventy-Five Dollars (\$275.00) for residential connections and Three Hundred Dollars (\$300.00) for commercial and other uses. Excess units will also be charged a capacity fee of Three Thousand One Hundred Fifty Dollars (\$3,150.00) for each excess unit, or fraction thereof. The capacity fee is an allowance for expansion and updating of the treatment plant.

b. For each 12,000 sq. ft. of a lot, one equivalent dwelling unit will be assessed a connection fee at the rate of Two Hundred Seventy-Five Dollars (\$275.00) for residential

connections and Three Hundred Dollars (\$300.00) for commercial and other uses for this first equivalent dwelling unit. Where more than one equivalent dwelling unit exists per 12,000 sq. ft. of area, the additional dwelling units will be assessed an additional capacity fee of Three Thousand One Hundred Fifty Dollars (\$3,150.00) per equivalent dwelling units or fraction thereof in excess of the first unit as well as a connection fee for the additional equivalent dwelling units at the Two Hundred Seventy-Five Dollar (\$275.00) rate for residential uses and Three Hundred Dollars (\$300.00) for commercial connections and other uses. The capacity fee is composed of an allowance for further expansion of the treatment plant.

Computation of sewer units will be based on the schedule pursuant to Paragraph 6.020 through 6.070 of this Code.

2. Where new construction or remodeling results in adding additional sewer units in the District on lands annexed subsequent to July 1, 1978, an additional capacity fee of Three Thousand Eight Hundred Dollars (\$3,800.00) per equivalent dwelling unit will be charged in addition to the connection fee of Two Hundred Seventy-Five Dollars (\$275.00) for residential and Three Hundred Dollars (\$300.00) for commercial and other uses for all units above the initial capacity allocated and paid for. Excess units will also be charged a capacity fee of Three Thousand Eight Hundred Dollars (\$3,800.00) for each excess unit or fraction thereof.

3. Where an existing building is remodeled or extended and such

existing building is already served by an existing sewer connection, additional connection and capacity fees shall be charged. This fee will be computed on the basis of the total sewer units for the remodeled or extended building, less the sewer units previously existing and paid for in the building prior to its remodeling or extension. Where the remodeled or extended building is within District boundaries as they existed prior to July 1, 1978, and where no prior agreement was made, rates in accordance with Paragraph 1 above will be applied. Where the remodeled or extended building is within District boundaries annexed subsequent to July 1, 1978, rates pursuant to Paragraph 2 above will be applied. A sewer connection permit must be obtained prior to commencing any work which results in a change in the sewer facilities within the remodeled or extended building or existing sewer line.

4. Sewer capacity allocations can only be transferred between contiguous parcels where the ownership is the same. For this particular ordinance and in this context, parcels separated by a road or irrigation ditch will be deemed to be contiguous if the parcels would join one another if it were not for the ditch or roadway and notwithstanding that the fee ownership of the ditch or roadway may be owned by a second party.

In the event the parcels consist of a subdivision unit owned by a developer, the transfer of sewer units will be restricted to transfers within units that are defined as a final unit on a final subdivision plat. Where a MGSD sewer allocation has been made for a parcel of property, the allocation shall be completely utilized on that property

before any additional allocation or connection requests will be considered by the Board for that property. In the event a piece of property with a sewer allocation is further parceled, the available capacity will be reduced by the connection requests within the original property boundary and in the order in which they were requested. The allocation of capacity when a property is divided shall be specifically approved by the MGSD Board.

5. Where there has been a sewer capacity allocation, the allocation will have to be paid for within nine (9) months of the date of the allocation, and the rates will be those in effect at the time of the allocation. Any allocation not paid for within the nine (9) month period will be forfeited. All allocated capacity must be completely used within two (2) years of the date of allocation. Except as limited by other provisions of this Section below, failure to use the capacity within this time will result in forfeiture of any or all purchased reserved capacity without notice. All money paid for such capacity shall also be forfeited to the District, all of which money shall then become the property of the District. Actually awarding or entering into a binding, written, bona fide construction contract with a licensed contractor for the installation of sewer service within the two-year period shall be deemed use of the capacity provided the contract requires installation of sewer facilities within a reasonable period of time (not to exceed six (6) months) in which to install the facilities. For good cause shown and demonstrated, and under very extenuating circumstances which the Board, in its absolute discretion, may accept or reject for any reason or no reason whatsoever, the Board may grant

one, and only one, six (6) month extension of time in which to use the capacity, provided that such

request for extension is made before the expiration of the original two (2) year period.

6. Any capacity fees paid for capacity for any completed project for which any connection permit has been issued may be refunded at the same rate at which initially assessed provided that refunds are requested within six (6) months of completion of the project, except that no refunds will be granted more than two (2) years after the payment of the capacity fee. A service charge of Fifty Dollars (\$50.00) will be charged for all refunds.

CHAPTER 7

RENDERING AND PAYMENT OF BILLS

7.010 Presentment of Bills

Statements for sewage rates and charges shall be rendered and mailed to the property owner. The bills shall be due and payable at the District office on or before the tenth (10th) day after the statement has been mailed. Use charges shall be billable in advance and shall begin to accrue the day on which service becomes available.

In the event a homeowners association exists, there shall be compliance with the requirements of Section 9.160(3).

7.020 Rates and Charges to Constitute Lien; Remedies; Penalties

1. No application for sewer service shall be accepted from any customer who has any delinquent account.
2. The District may bring an action against the owner of the premises for the collection of the amount of the delinquency, all penalties and costs of collection, including a reasonable attorney's fee. Until paid, all rates, tolls or charges shall constitute a lien on the property and may be foreclosed by the District as provided by the statute for the foreclosure of a lien.
3. A basic penalty for the non-payment of charges when due of ten percent (10%) for the first month's delinquency shall be charged. In addition, a penalty of one and one-half percent (1-1/2%) per month for each month for non-payment of the charges will be assessed. The basic penalty shall be imposed on the first day of the calendar month following the due date under Section 7.010 above.

4. When an owner notifies the District that water from the applicable water utility has been discontinued and there is no private water system use, the District will verify this, and the sewer charges will be as per the rate charged for non-users.

CHAPTER 8

DEPOSITS

8.010 Amount to Establish or Re-Establish Credit

A deposit may be required to insure future payments, but the deposit shall not exceed a four (4) months' estimated billing. An application for service will be refused because of non-payment of bills for other classes of service at another address by the same owner.

8.020 Applicability to Unpaid Accounts

Deposits made under this rule will be applied to unpaid bills for service when such service has been discontinued.

8.030 Return of Deposits

Upon discontinuance of service, the District will refund the balance of the customer's deposit in excess of unpaid bills for the service for which the deposit was made.

8.040 Disputed Bills

In the case of a dispute between a customer and the District as to the correct amount of any bill, the customer shall deposit with the District the amount claimed by the District to be due.

If the customer fails to make such deposit within fifteen (15) days after written notice by the District, the District may commence legal proceedings to collect the bill.

In the event of dispute concerning any bill, charge or service, the District will make such an investigation as may be required by the particular case and will report the result of the investigation to the customer.

CHAPTER 9

ANNEXATION OF PROPERTY INTO THE DISTRICT

9.010 Application

An applicant desiring to have property annexed into the District, for the purpose of obtaining sewerage service, shall make an application to the District in writing. The application shall be in the form of a petition and will contain:

1. An accurate legal description of the property;
2. Consent of all the fee owners;
3. Acknowledgment of the fee owner's signatures by a Notary Public.

9.020 Map

In addition to the annexation petition, the applicant will submit a vicinity map showing the area to be annexed in relation to the existing District boundaries. The area to be annexed must consist of a complete legal parcel or complete legal parcels of land as such are understood and defined by applicable Douglas County ordinance. No parcel may be annexed to the District unless that parcel will be physically contiguous to the District immediately after annexation occurs. For purposes of this Section, a parcel separated from the District by a road, ditch or a parcel of other property not legally capable of being annexed to the District shall be deemed contiguous. Applications seeking to annex property comprising less than a complete parcel or complete parcels can be accepted on assurance of the applicant that the applicant will undertake all necessary steps to cause any property not

consisting of a complete parcel or parcels as defined above to become a complete legal parcel. Annexation will not be finally approved unless and until all property desired to be annexed consists of a complete legal parcel or parcels as defined above. Tentative subdivision map plans will not be acceptable. The map will include topographic features of the area and will be on a size and scale acceptable to the District.

9.030 Title Report

A preliminary title report prepared within sixty (60) days and any additional pertinent information required by the District.

9.040 Application Fee

The application shall be accompanied by a refundable application fee of One Thousand Dollars (\$1,000.00). This fee will be applied against the District's expenses for review of the application including preparation of the annexation map, and any balance remaining will be refunded. In the event the District's expenses for review of an application exceed the specified application fee, the applicant will be responsible to pay to the District the additional expenses and will make such payment prior to the application being approved.

9.050 Timing of Hearing

The above information is to be submitted fifteen (15) days prior to the regular monthly meeting of the District. The District will initially approve, conditionally approve or deny the annexation in concept only. If the applicant's application and supporting data are incomplete, the applicant shall have an additional thirty (30) days in which to correct any deficiencies, but the date of the original

application will govern any priorities. If after the second hearing the application still fails to meet the requirements, the application shall be rejected, and the applicant will lose his position in the priority listing of applicants.

9.060 **Public Notice**

The District will prepare and cause to be published once a week for three (3) consecutive weeks in at least one (1) newspaper of general circulation in the District a notice of Public Meeting containing the place, time and date of such meeting and the names and addresses of the petitioners. Additionally, notice of the meeting will be done in accordance with NRS Chapter 241.

9.070 **Hearing**

The Board shall hear the petition at an open meeting and shall conditionally grant, deny or table the petition for no longer than one (1) month pending the District's obtaining additional information it might require. If the petition is conditionally granted, the Board may authorize the Chairman of the Board to sign the appropriate Town Boundary Map reflecting the annexation at the next regularly scheduled Board meeting. Except as set forth in Section 9.071, no annexation will be approved without the property being first approved for annexation into the Town of Gardnerville or Minden by the Douglas County Board of Commissioners.

The applicant shall have six (6) months to meet the above conditions. Failure of the applicant to meet these requirements within this period shall result in the applicant having to refile for annexation.

9.071 **Parcels Within a 100 Year Flood Zone**

Parcels of land having a majority or their area inside a 100 year flood zone as determined by the United States Federal Emergency Management Agency (FEMA) and zoned for one single dwelling unit, regardless of the size of the parcel:

- (a) Shall not be required to be annexed by the towns of Minden or Gardnerville.
- (b) Shall not be subjected to any acreage fee but instead shall be assessed a charge of \$600.00 per equivalent dwelling unit of capacity allocated.
- (c) Any application or request for any additional capacity shall require the applicant to pay the full acreage fee applicable to the parcel at the time of request.

Except as set forth in this section, all other fees, rules and requirements set forth in this code shall apply to parcels within the 100 year flood zone.

9.080 **No Withdrawal**

There shall be no withdrawal from a petition after consideration by the Board nor shall further objections be filed except in the case of fraud or misrepresentation. The Board may, if it elects and the petition desires, annex less than the total area being petitioned for annexation.

9.090 **Acreage Fee and Capacity Fee**

Except as set forth in Section 9.071, the full amount of the acreage fee must be paid to the District when the written annexation agreement is

returned to the District as forth in Section 9.100 below. Payment must accompany the written agreement executed by the applicant. The applicant shall also pay a capacity fee of Three Thousand Five Hundred Dollars (\$3,500.00) per unit of capacity on the earliest of the following dates:

1. Nine (9) months from date of allocation of capacity;
2. Prior to the issuance of a connection permit;
3. Before MGSD approves and/or signs any final subdivision or parcel map;
4. Before MGSD signs any annexation map.

Industrial users will be treated individually at appropriate public meetings.

9.100 Written Agreement and Restrictions

Property annexed shall be subject to the following restrictions which shall be contained in a written agreement executed in a recordable form between the applicant and the District and which shall be deemed a covenant running with the land. The applicant shall have only sixty (60) days from the date the written annexation agreement is delivered to him, inclusive of any and all mailing time, to return the signed and notarized annexation agreement to the District accepting all of the terms and conditions of the annexation agreement without making any changes or modifications thereto. Should the annexation agreement not be returned within the sixty (60) day period, the offer to annex shall be automatically revoked without any notice by the District and the applicant must then reapply. For good cause shown and demonstrated, which the Board, in its absolute discretion, may

accept or reject for any reason or no reason whatsoever, the Board may grant one and only one sixty (60) day extension to return the signed and notarized annexation agreement to the District, accepting all of the terms and conditions of the annexation agreement without making any changes or modifications thereto, provided however, that the request or petition for extension shall have been filed with the District before expiration of the original sixty (60) day period. The date of Annexation shall be deemed to have occurred on the date the annexation agreement is executed by the District. The applicant must use any and all capacity purchased within two (2) years of the date of allocation. Entering into an awarded, binding, written, bona fide construction contract with a licensed contractor in the State of Nevada for the installation of sewer service within the two-year period shall be deemed use of the capacity provided the contract requires installation of sewer facilities within a reasonable period of time (not to exceed six (6) months) in which to install the facilities. For good cause shown and demonstrated, and under very extenuating circumstances which the Board, in its absolute discretion, may accept or reject for any reason or no reason whatsoever, the Board may grant one and only one six (6) month extension of time in which to use the capacity, provided that such request for extension is made before the expiration of the original two-year period. Annexed property shall be subject to all the current rules, regulations, ordinances, ad valorem taxes or other taxes and charges adopted or levied by the District. Any other provisions deemed reasonably necessary by the District due to special circumstances pertaining to any specific annexation applications shall

be included in the agreement which also shall include the number of allocated units. Failure to comply with the time requirements set forth in this section shall result in forfeiture of all capacity purchased without notice to the applicant, and on forfeiture, all money paid to the District shall then become the property of the District and no amounts shall be refunded.

9.120 Signing Map and Filing With County Clerk

To complete the annexation process, the Chairman of the Board will sign the appropriate annexation map and the Board will adopt an ordinance annexing said properties and will file two (2) copies of said ordinance with the County Clerk as prescribed by NRS 318.075.

9.130 Design and Dedication of Facilities

All sewers shall be designed and constructed at the applicant's expense, and the sewers at the Board's discretion may be required to be dedicated to the District upon completion and approval by the District. The applicant may request that the sewers be designed and/or constructed by the District, and in the event the District elects to design and/or construct the sewers, the applicant will pay in advance for this cost.

9.140 Oversizing Cost

All oversized, beyond the applicant's need, of on-site or off-site trunk sewer lines (10" in diameter or over) required by the District will be constructed at the applicant's expense. Upon connection to the sewer system, the applicant shall dedicate all such oversized trunks to the District and upon dedication, the District will operate and maintain all such trunks. The District shall reimburse the applicant for the

additional cost incurred for the increased size or design of such trunks and/or other facilities based on the following guidelines:

1. The District engineer shall determine the amount of money necessary to cover the cost of the construction for the oversized trunk (10" in diameter or over) over and above the cost of the trunk and/or facilities that the applicant would expend if the construction of the sewer line were of the size, design and capacity sufficient to serve only the interest of the applicant. This excess cost shall then be prorated along the entire length of the trunk on a linear per-foot basis, hereinafter referred to as the "unit cost".

2. Any and all new applicants for capacity connecting to the oversized trunk shall pay to the District an amount based on the linear footage of trunk (10" in diameter or over) situated on the new applicant's property multiplied by the unit cost (per foot cost) originally determined by the District Engineer. The District shall refund these amounts to the original applicant who paid for the original construction of the oversized trunk (10" in diameter or over). Refunds shall be made as follows:

- a. Refunds shall be made without interest;
- b. Refunds shall be made within 90 days after the District receives payment from new applicants connecting to the trunk.
- c. If two or more applicants or parties pay for the oversized trunk, refundable amounts will be distributed to each applicant or party in the same proportion as each individual's payment bears to the total cost.

No refund will be made by the District for any oversized trunk (10" in diameter or over) costs incurred by the applicant or applicants after a period of ten (10) years from the date the original application or applicant incurred such costs. In no event shall refunds exceed 100% of the oversized costs approved by the District Engineer pursuant to 9.140(1). Any and all such non-refundable amounts, even if later collected by the District from other applicants shall become the property of the District.

9.150 Construction Design

All sewer design and construction shall meet the requirements of the District's applicable ordinances and its Sewerage Master Plan.

9.160 Contracts of Service

1. The applicant is not eligible to annex to the District unless each parcel to be annexed will be physically contiguous to the District immediately after annexation occurs, unless contiguity is prevented by a parcel legally incapable of being annexed into the District.

2. Should the applicant be denied annexation because applicant's parcel is not contiguous to the existing District boundaries, and the application is in order but for not being contiguous, it will be treated as an application for a contractual service to be negotiated. Services granted to areas outside the District will be subject to the following rates and charges and conditions:

a. A two (2) year capacity reservation fee of Three Thousand Five Hundred Dollars (\$3,500.00) per Equivalent Dwelling Unit (non-refundable) shall be paid for up to maximum zoning density on the entire area to be included in the contract. Additionally, the acreage fee

of Six Hundred Dollars (\$600.00) per acre must be paid to the District when the contract for service, as more fully described below, is returned to the District. Payment must accompany the written contract executed by the applicant. Payment for the capacity fee must be in full on the earliest of the following dates: (1) Nine (9) months from the date the District allocates the capacity; (2) Prior to the issuance of a connection permit; (3) Before MGSD approves and/or signs any final subdivision or parcel map. The applicant shall have only sixty (60) days from the date the contract is delivered to the applicant, inclusive of any and all mailing time, to return the signed contract to the District accepting all of the terms and conditions of the contract without making any changes or modifications thereto. Should the contract not be returned within the sixty (60) day time period, the offer to contract shall be deemed revoked and the applicant must reapply for a contract of service. For good cause shown and demonstrated, which the Board, in its absolute discretion, may accept or reject for any reason or no reason whatsoever, the Board may grant one and only one sixty (60) day extension to return the signed and notarized annexation agreement to the District, accepting all of the terms and conditions of the annexation agreement without making any changes or modifications thereto, provided however, that the request or petition for extension shall have been filed with the District before expiration of the original sixty (60) day period. Should the capacity fee not be paid within the nine (9) month period prescribed by this section, the contract shall be automatically deemed revoked without further notice to the contracting party, without refund of any

money paid to the District, all of which money shall become the property of the District.

b. The Connection Fee shall be the comparable rate within the District for each Equivalent Dwelling Unit at the time of connection.

c. Monthly charges to individual customers will be the same as customers using sewerage facilities within the District for a comparable use but adjusted to account for the loss of the tax revenues. Billing will be on a quarterly basis. Monthly charges and other charges may also be adjusted to account for and accommodate for any future assessments or rate increases paid by or assessed to customers using sewer facilities within the District. Such charges will also be the same as customers using sewage facilities within the District for a comparable use. Monthly charges shall commence immediately after a signed written contract is returned by the applicant.

d. Covenants at the time of contraction will be created whereby subsequent assignees, heirs and devisees of the contracting party, as well as the original contracting party, will be bound by these terms. The covenant will provide that in those cases where the lands likewise have become contiguous to the towns of Minden and Gardnerville, the contracting party shall apply for annexation to these towns at the same time. Nothing in this Section shall be deemed to require the District to request or require that an area under contract be annexed.

e. A contracting party shall have two (2) years in which to use the capacity for which he or she has contracted. Failure to use the capacity within this time will result in forfeiture of all purchased reserved

capacity without notice to the applicant or contracting party. All money paid for such capacity shall also be forfeited to the District, all of which money shall then become the property of the District. A contracting party actually awarding and entering into a binding, written, bona fide construction contract with a licensed contractor for the installation of sewer service within the two-year period shall be deemed use of the capacity provided the contract requires installation of sewer facilities within a reasonable period of time (not to exceed six (6) months) in which to install the facilities. For good cause shown and demonstrated, and under very extenuating circumstances which the Board, in its absolute discretion, may accept or reject for any reason or no reason whatsoever, the Board may grant one and only one contracting party a six (6) month extension of time in which to use the capacity, provided that such request for extension is made before the expiration of the original two (2) year period.

f. Notice of the District negotiations of a contract for service will be made in accordance with Section 9.060.

g. If a parcel under a contract for service becomes contiguous to the existing MGSD boundaries (or when an area being contracted with becomes contiguous or would become contiguous but for intervening parcels not legally capable of being annexed into the District) and if the District so desires, the District, at a duly noticed meeting may in its sole discretion annex the parcel to the District without any further action of the owner or owners of the parcel.

3. For a Subdivision or Development within the District boundaries for which there is a homeowners association, all billings

for service within the development will be paid by the homeowners association. The covenants and restrictions pertaining to the development must provide for such payment, and this portion of the covenants and restrictions may not be modified without the prior written approval of the District. In the case of an annexation or contractual service, these provisions will appear in the covenant executed by the District and annexed pursuant to Chapter 9 and in the event of contractual services, it will be included as an integral part of the contract.

9.170 County Approval as a Condition Precedent to Granting of any Sewer Allocation

1. Prior to granting of any sewer allocation outside of the District Boundaries, the applicant shall first have granted conditional approval of his project by the County Commissioners of Douglas County.
2. The above conditional approval is not required for existing developed areas or for minor projects generating less than one thousand (1,000) gallons of sewage per day as determined by the District in its sole discretion.
3. The applicant shall design and construct public sewers within his boundaries to comply with all applicable conditions of the MGSD Ordinances, Rules, Procedures and Policies concerning public sewer construction.
4. The final location, depths, slopes, size, specifications and special conditions of all public sewer improvements shall be the decision of the District.
5. At the time of annexation, if capacity is reserved, the reservation

of plant capacity shall be deemed to be the summation of the Equivalent Dwelling Units as per the County zoning.

6. Applicants for annexation shall receive a priority for sewer capacity dating from the date a completed application has been accepted by the District's Board of Trustees as being in order.

CHAPTER 10

EXTENSIONS OF PUBLIC MAIN SEWERS

10.010 Application

The applicant shall make an application in writing and shall provide:

1. Two (2) prints of a topographic map of the area to be served at a suitable engineering scale.
2. The number of units to be served.
3. The application is to be submitted to the District office no later than fifteen (15) days prior to the regular monthly meeting. If complete, it will be heard by the Board at its regular meeting.
4. The applicant will be advised of the District's decision as to the application for sewer extension within forty-five (45) days after the meeting.

10.020 Applicant's Design of Sewer Extensions

1. An applicant shall pay Five Hundred Dollars (\$500.00) in advance toward the District expenses for reviewing the design. Should the actual expenses be less than Five Hundred Dollars (\$500.00), the difference will be refunded. The expense of MGSD staff will be computed at prevailing rates as established by the District from time to time. The District reserves the right to hire legal and other professional services to assist in reviewing the application, and these costs will also be paid by the applicant.
2. Two (2) copies of the tentative plans for the sewer extension shall be submitted to the District. Sizes, depths and other constraints deemed necessary will be marked on the plan by MGSD staff, and

one (1) set of the marked plans will be returned to the applicant within two (2) weeks.

3. The applicant, at his expense, shall have prepared in accordance with the tentative sewer parameters outlined in 2 above, three (3) copies of each of the following: plans, specifications and a final construction cost estimate. In accordance with applicable rules, regulations and ordinances and in a format satisfactory to the District and done by a Civil Engineer registered in Nevada.

4. The completed sewer design shall be submitted to the MGSD office. If the design has been submitted fifteen (15) days prior to the regular monthly meeting, the design will be presented to the trustees at that meeting. Within forty-five (45) days of this meeting, one (1) set of plans shall be returned to the applicant marked approved, disapproved or subject to corrections.

10.030 District Design of Sewer Extension

1. The applicant shall in advance pay one hundred twenty percent (120%) of the MGSD's estimated cost of the design and plan preparation. If the actual expenditure exceeds or is below the estimated advance payment, the difference will be promptly paid or refunded. The expenses of the MGSD staff shall be charged at a rate commensurate with prevailing rates in the private sector for equivalent services. The District reserves the right to hire outside professional services in the plan and specification preparation. These costs will also be promptly paid for by the applicant.

2. The District will proceed as expeditiously as possible to complete the plans and specifications, and they will be approved at the next regular meeting.

10.040 MGSD Contribution

The applicant shall pay for all costs and expenses of MGSD related to the sewer extension, in accordance with the District's applicable ordinances, rules, regulations and master plan.

10.050 Construction of Sewer Extensions

1. All construction and procedures shall be in accordance with the District's applicable rules, regulations and ordinances.

2. The applicant shall furnish a performance payment bond, or an acceptable letter of credit from a full service bank, in an amount not less than one hundred fifty percent (150%) of the actual construction cost as evidenced by a signed contract or written estimate approved by a professional engineer registered in the State of Nevada. If the facilities shall be wholly or partially built, the District, in its sole and unfettered discretion, may reduce the amount of such bond to such amount as it deems appropriate under all circumstances. Cash or a cashier's check may be deposited or other financial arrangements of equal or greater assurance may be made, which arrangements must be acceptable to the Board, the acceptability of which shall remain a matter wholly within the sole and unfettered discretion of the Board. Sewer permits will not be issued, nor will connection fees be accepted by the District, until the sewer main has been constructed and has been inspected by and received final, formal approval from the Board, or unless the applicant

has posted a bond or provided other assurances of financial responsibility as required herein.

3. The applicant shall secure any required permits and shall deliver to the District grants of any required easements prior to construction.

4. The applicant shall give the District five (5) days' notice prior to construction.

5. The District will provide on-site inspection of construction, but the presence of the inspector does not relieve the applicant of the responsibility of conforming to District rules, regulations and ordinances. All costs of inspection, supervision, administration, legal, engineering or other related expenses of the District shall be paid by the applicant to the District upon demand. The District's time will be charged at a rate commensurate with prevailing rates in the private sector for equivalent services.

6. The applicant shall furnish the District reproducible as-built tracings that are certified correct by the engineer responsible for the preparation of the construction plans prior to the District's accepting any line.

7. All bills payable by the applicant to the District shall be paid prior to the District's accepting any line.

8. All public sewers shall become the property of the District upon final acceptance.

10.160 Location of Sewers

Public main sewers shall be laid whenever possible in a dedicated

street or alley. Mains in easements will not be approved within any subdivision, unless prior approval is given by the District. Where no dedicated street or alley is available for a main in a subdivision, the main may be laid in an easement twenty feet (20') in width, obtained by and at the expense of the applicant. The easement will provide that it will be perpetual, and that no buildings, structures, fences, trees, shrubs or other improvements which would interfere with its use by the District may be placed upon it without an encroachment permit, and that proper access to the easement by the District will be provided. The easement may allow other utility lines to be installed in the easements so long as they do not interfere with its use by the District. The grant of the easement shall be to the District in a form approved by the District's legal counsel. All easement dedications will be recorded at the applicant's expense by the District prior to construction.

CHAPTER 11

PROCEDURES AND POLICIES FOR CONNECTION

11.010 Single Family Residential Connections

1. The applicant will obtain a connection permit from the District office and pay a connection capacity fee pursuant to Chapter 6.
2. The connection must be constructed according to the District rules, regulations and ordinances.
3. Each connection must be inspected and approved by the District prior to backfill. The District will be given twenty-four (24) hours advance notice when inspection is required.
4. Should an unapproved connection or uninspected connection be placed in service, the District may seek legal redress unless the condition is promptly remedied.

11.020 All Other Classes of Connection

1. All applicants desiring connection shall submit a written application to the District and will pay the fees pursuant to Chapter 6.
2. The complete application shall be submitted to the District office fifteen (15) days prior to the regular meeting.
3. The application shall contain:
 - a. A signed statement from the applicant as to the use of the intended building.
 - b. A building plan showing the number of plumbing fixtures and drains.

- c. A sewer plan showing the location and elevation of the ground and sewer at the point of connection to the building, the slope, size and material of the connecting sewer and other information requested by the District deemed necessary for proper evaluation.
- d. The completed application will be reviewed by the Board, and a decision to approve, to disapprove or to approve contingent upon set conditions will be rendered no later than forty-five (45) days following the meeting.
- e. Chapters 6 and 9 and the procedures therein also apply for an approved connection.
- f. Applicants may, in writing, request a special Board meeting upon the payment of a Two Hundred fifty Dollar (\$250.00) fee. If the board elects to hear the matter at a scheduled meeting, the Two Hundred Fifty Dollar (\$250.00) fee will be refunded.

CHAPTER 12
INFORMATION AVAILABLE TO THE PUBLIC

12.010 **Information Publicly Available**

The District will maintain for public inspection at its office pertinent information regarding services rendered to include the following:

1. Maps of the collection system and operation records.
2. A copy of the rate schedules, general rules of the District, service area maps, forms of contracts and applications applicable to the territory served office.

CHAPTER 13
CONTINUITY OF SERVICE

13.010 **Emergency Interruptions**

1. The District will make all reasonable efforts to prevent interruptions to service and when such interruptions occur, the District will endeavor to re-establish service within the shortest possible time consistent with the safety for its customers and the general public.
2. If an emergency interruption of service affects the service to a customer, the District will promptly endeavor to notify the customer and any public agency with jurisdiction of the interruption and the subsequent restoration of service.
3. The District will not be responsible for the interruption, flooding, overflowing, line breakage or any loss or damage if same is caused by an Act of God, fire, strike, riot, war, accident, breakdown, action by a governmental body or any other cause beyond the control of the District or any cause which does not result from the gross negligence of the District. District does not waive, but rather affirms its immunity from liability or suit and/or any limitation on liability pursuant to the full extent permitted by any applicable law.
4. Under disaster conditions, the District will cooperate to the fullest extent with the governmental agency having authority.

13.020**Scheduled Interruptions**

Whenever the District finds it necessary to schedule an interruption of service it will, where feasible, notify all affected customers stating the approximate time and anticipated duration of the interruption.

Scheduled interruptions will be made during hours which will provide the least inconvenience to the customers consistent with reasonable District operations.

CHAPTER 14

PROTECTION FROM DAMAGE AND IMMUNITY FROM LIABILITY

14.010 Actions to Protect Property

Any person who maliciously, willfully or negligently breaks, damages, destroys, uncovers, defaces or tampers with any structure, appurtenance or equipment which is a part of the District's sewerage works will be liable to the District and to any third party to the full extent permitted by law.

14.020 District Grants of Easements

The District may, in its sole unfettered discretion, grant a permit of encroachment on, to, or over its facilities. Such grant shall be considered on a case by case basis. The encroachment permit, if granted, shall be in substantially in the form attached as Exhibit A to this Chapter and must be signed by the District and the permittee before any right of encroachment is granted. The right of encroachment will be governed by the contract and covenant entered into below.

14.030 Immunity From Suit A Limitation of Liability.

District does not guarantee service or continuity of service. Interruption of service or other acts or omissions of District may result in inconvenience, injury or damage. District asserts and preserves, to the full extent permitted by law any immunity from suit or limitation of liability on damages applicable to District or any other public agency or political subdivision of the State.

EXHIBIT A TO CHAPTER 14
REVOCABLE ENCROACHMENT PERMIT

WHEREAS, _____ and _____ are the Fee Owners of the below described real property situated in Douglas County, Nevada:

SEE EXHIBIT "A" ATTACHED

WHEREAS, as the MINDEN-GARDNERVILLE SANITATION DISTRICT is the Owner of an easement across the above-described real property and more specifically described as follows:

SEE EXHIBIT "B" ATTACHED

WHEREAS, as the Fee Owners are desirous of placing certain surface objects and/or improvements on said easement which are specifically limited to, identified, described as follows, and include no other:

WHEREAS, Fee Owners have covenanted, represented, promised, warranted and assured MINDEN-GARDNERVILLE SANITATION DISTRICT that the improvements contemplated herein will not, in any way, interfere with MINDEN-GARDNERVILLE SANITATION DISTRICT's rights, or with its use and enjoyment of its easement for all permitted uses set forth in its Grant or Right of Easement.

WHEREFORE, it is agreed as follows:

1. MINDEN-GARDNERVILLE SANITATION DISTRICT will allow the Fee Holder to make the specific limited encroachment

described above subject to the following conditions:

a. MINDEN-GARDNERVILLE SANITATION DISTRICT may for any reason or purpose it deems in the best interest of MINDEN-GARDNERVILLE SANITATION DISTRICT, in its sole discretion, move, destroy, change, alter, inspect or repair the encroachment, and should it do so, the Fee Holder will be responsible for all such costs, fees, charges and expenses incurred in effecting such change, alteration, destruction, removal, inspection or repair of said encroachment, and shall likewise be responsible for all such costs incurred in restoring said encroachment to its former condition or such subsequent acceptable condition to MINDEN-GARDNERVILLE SANITATION DISTRICT free and harmless from any and all such costs.

b. MINDEN-GARDNERVILLE SANITATION DISTRICT will not be responsible for any damages made to said encroachment providing, however, that all activities conducted by MINDEN-GARDNERVILLE SANITATION DISTRICT will be done in a reasonable and business-like manner.

c. MINDEN-GARDNERVILLE SANITATION DISTRICT may revoke this permit on thirty (30) days' written notice to permittee, and reserves the right to revoke said license for any reason, or for no reason whatsoever, or for any cause, or for no cause whatsoever, and permittee acknowledges that but for reservation of this right, MINDEN-GARDNERVILLE SANITATION DISTRICT would not permit the encroachment contemplated herein and would not enter into this agreement.

2. The above agreement will be binding on the heirs, assigns and executors the Fee Owners.

CHAPTER 15

COMPENSATION OF TRUSTEES

15.010

Annual Fee

Providing the budget is adequate, the trustees of the District and the Chairman shall receive compensation payable monthly in such other amount or amounts as may be fixed by the Trustees from time to time.

PART TWO
TECHNICAL REQUIREMENTS FOR SEWER FACILITIES
CHAPTER 16
PRIVATE SEWAGE DISPOSAL

16.010 **Private Sewage Disposal Connections**

Where an existing inhabited property within the District cannot be connected to the public sewer due to unavailability of such public sewer, it may be connected, as an interim measure only, to a private sewage disposal system in compliance with the latest regulations of the Nevada Division of Environmental Protection governing private sewage disposal systems. Use of such private sewage disposal system will be discontinued when a public sewer becomes available. Use of private sewage disposal system for new buildings is prohibited.

16.020 **Connections When Public Facilities Available**

When a public sewer becomes available to a property served by a private sewage disposal system within the Minden Gardnerville Sanitation District service area and connection is mandated by the applicable governmental authority, direct connection shall be made to the public sewer within sixty (60) days, then application to the District shall be made for annexation or contract of service and any septic tanks, cesspools and similar private sewage disposal facilities shall be abandoned and filled with suitable material.

16.030 **Maintenance Of Private Systems**

The owner shall operate and maintain the private sewage disposal facilities in a sanitary and nuisance-free manner at all times, at no expense to the District.

CHAPTER 17

USE OF THE PUBLIC SEWERS

17.010 Special Use Permit to Discharge

No person shall discharge, or cause to be discharged, any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water, swimming pool water or industrial process waters to any sanitary sewer.

17.020 Prohibited Discharge

No person shall discharge, or cause to be discharged, any of the following described waters or wastes to any public sewers:

1. Any gasoline, corrosive acid, benzene, naphtha, fuel oil or flammable or explosive liquid, solid or gas.
2. Any greases, waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, which will injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance or create any hazard in the sewage treatment plant including, but not limited to, cyanide in excess of 2 mg/l as CN in the wastes as discharged to the public sewer.
3. Any waters or wastes having a pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage work.

4. Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substance; or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the District for such materials.
5. Any waters or wastes containing phenols or other taste or odor-producing substances in such concentrations exceeding limits which may be established by the District as necessary after treatment of the composite sewage to meet the requirements of the state, federal or other public agencies of jurisdiction for such discharge to the receiving waters.
6. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the District in compliance with applicable state or federal regulations.
7. Materials which exert or cause:
 - a. Unusual concentration of inert suspended solids (such as, but not limited to, Fullers Earth, lime, slurries and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate).
 - b. Excessive discoloration such as dye wastes and vegetable tanning solutions.
 - c. Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.

d. Unusual volume of flow or concentration of wastes constituting slugs.

8. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

9. No water from swimming pools or water from washing the decks of swimming pools will be allowed.

17.030

District Right to Reject, Limit, or Condition Discharge

If any waters or wastes are discharged, or are proposed to be discharged, to the public sewers which contain the substances or possess the characteristics enumerated in Paragraph 17.020 and which, in the judgment of the District, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters or which otherwise create a hazard to life or constitute a public nuisance, the District may:

1. Reject the wastes.
2. Require pretreatment to an acceptable condition for discharge of the public sewers.
3. Require control over the quantities and rates of discharge.
4. Require payment to cover the added cost of handling and treating the wastes not covered by existing sewer charges. If the District permits the pretreatment or equalization of waste flows, the

design and installation of the plants and equipment shall be subject to the requirements of all applicable codes, ordinances and laws.

17.040

Interceptors Required

1. Purpose

1.1 The intent of this policy is to provide guidelines and procedures to ensure compliance with MGSD's Sewer Use Codes. This policy is designed to aid in the prevention of sanitary sewer blockages and obstructions from contributions and accumulation of fats, oils and greases discharged to the sanitary sewer system from industrial or commercial establishments, particularly food preparation and serving facilities.

2. Policy

2.1 MGSD, like most sewerage treatment facilities, continues to experience sewer blockages caused by the accumulation of fats, oils and greases on the surfaces of sewer lines. Greasy wastewater can be discharged to the sewer system from several sources, including food service operations. In order to reduce sewer blockages, customers in the MGSD service area that discharge wastewater that contains grease must install and properly operate and maintain a grease trap or interceptor.

2.2 Grease, oil and sand interceptors shall be provided when, in the opinion of MGSD, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors shall not normally be required for residential users. All interception units shall be of a type and capacity which is certified by a qualified professional, such as an engineer, as

meeting MGSD's requirements and shall be easily accessible for cleaning, testing and inspection.

3. Definitions

3.1 Fats, Oils, and Greases (FOG's): Organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in 40 CFR 136, as may be amended from time to time. All are referred to herein as "Grease" or "Greases."

3.2 Food Preparation or Serving Facility: Any commercial or industrial facility that prepares or serves food, including but not limited to a restaurant, café, cafeteria, snack bar, grill, deli, catering service, bakery, grocery store, butcher shop, or similar establishment that discharges wastewater to the MGSD system.

3.3 Cooking Establishments: Those establishments primarily engaged in activities of preparing, serving, or otherwise making available food for consumption and that use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching and which discharge wastewater to the MGSD system. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing.

3.4 Grease Trap or Interceptor: A device for separating and retaining waterborne Greases and Grease complexes prior to the

wastewater exiting the trap and entering the MGSD sanitary sewer collection and treatment system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the sanitary sewer collection and treatment system. Grease Traps and Interceptors are sometimes referred to herein as "Grease Interceptor."

3.5 Minimum Design Capability: The design features of a Grease Interceptor and its ability or volume required to effectively intercept and retain Greases from greaseladen wastewaters discharged to the public sanitary sewer.

3.6 Non-Cooking Establishments: Those establishments primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking. These include cold dairy and frozen foodstuffs preparation and serving establishments.

3.7 User: Any person, including those located outside the jurisdictional limits of MGSD, who contributes causes or permits the contribution or discharge of wastewater into the MGSD sewer collections system, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

3.8 Vehicle Maintenance Facility: Any commercial or industrial facility where automobiles, trucks, or equipment are serviced or maintained, including garages, service stations, repair shops, oil and lubrication shops, or similar establishments.

4. Applicability.

4.1 The following types of facilities will be required to have grease interceptors: restaurants, schools, hospitals, service stations, car

washes, vehicle repair and lubrication facilities, nursing homes, and any other facility that handles grease and which discharges wastewater containing grease into the MGSD sewer collection system. All such establishments are required to have a properly sized and functioning grease interceptor which a qualified professional certifies, to MGSD, is designed to meet MGSD's sewer use and grease control requirements.

4.2 All vehicle maintenance facilities are required to have a properly sized grease, oil and sand interceptor.

4.3 Facilities other than those noted in Section 4.1 and 4.2 may require the installation of a grease and oil interceptor. The MGSD District Manager, Engineer or other designee of MGSD shall determine the need and applicability of such device.

5. Design:

5.1 Access manholes, with a minimum diameter of 24 inches, shall be provided over each chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.

5.2 All interceptors must be located outside of the building as close as feasible to the source of the wastewater, in such a manner that personnel from MGSD can inspect the interceptors at any time.

5.3 MGSD shall be notified of any changes of operation or process at the permitted establishment. The establishment may be required to upgrade their grease interceptor to meet current requirements and

standards.

5.4 The following documents, in addition to any other documentation which may be required, shall be submitted to MGSD for review and approval prior to issuance of a permit for installation of an interceptor. All installations of interceptors must be inspected by MGSD personnel prior to backfilling. Any changes to the approved plan shall be approved by MGSD, and all applicable fees, if any, shall be paid prior to implementations.

- a) A site plan showing the location of the interceptor, lines and cleanout or manhole;
- b) Details of the interceptor, lines and cleanout or manhole;
- c) Formula and calculations used to determine the interceptor capacity. (See MGSD Standard Details Sheet for sizing calculations.)

5.5 Every interceptor shall have sufficient capacity to perform the service for which it is provided but in no event shall be less than 750 gallons of capacity. All interceptors must be designed using standard engineering principles for sedimentation and floatation in gravity separators. Baffles and good inlet design are required to deflect the flow across the surface areas of the units and sufficient grease and solids storage capacity is required. Interceptors shall be rated for the designed flow-through rate of the unit in gallons/minute.

5.6 Interceptors shall be installed by users as required by MGSD, at the user's expense. All interceptors shall be of a type, design, and capacity approved by MGSD and shall be readily and easily accessible for cleaning and inspection. All such interceptors shall be serviced

and emptied of accumulated waste contents as required in order to maintain minimum design capabilities or effective volume of the interceptor, but not less than once every 60 days.

6. Existing Establishments.

6.1 Businesses and other locations subject to this regulation which were in operation before the effective date of this regulation ("Existing Businesses") and do not have grease interception systems are generally required to install such a system within one year of the effective date of this regulation. Such businesses may receive approval from the MGSD District Manager, Engineer or other designee of MGSD, to install a system under alternate standards taking into account the circumstances of the business's operation, production of waste grease and the practicality of installation under normal requirements.

6.2 Existing businesses with an existing grease interception system that does not meet MGSD's standards may be required to upgrade the system or may be allowed to continue use of the present system subject to requirements such as a clean-out frequency of less than 60 days.

7. Servicing and Records.

7.1 Servicing and maintenance are essential for the efficient operation of grease traps and interceptors. All grease interceptors shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capability or effective volume of the grease interceptor. Servicing frequency is site-specific and is dependent on the amount of oil and grease and suspended solids generated at each operation and the size of the grease trap or

interceptor. In no case shall the frequency of the cleaning be less than once every 60 days or as otherwise specified in MGSD's requirements for the interceptor system. The volumes of greases and solids in grease traps and interceptors must not exceed the designed grease and solids storage capacity of the unit.

7.2 All grease interceptors shall be cleaned by a properly licensed cleaning and disposal business.

7.3 All users, including food preparation or serving facilities and vehicle maintenance facilities shall maintain a written record of maintenance performed on the interceptor for a minimum of three (3) years. All such records will be available for inspection by MGSD upon request.

8. Variance/Appeal.

8.1 Under certain circumstances, the interceptor size and location may need special exceptions to this policy. If an exception to this policy is requested, the user must demonstrate that the size and location will not cause the facility any problems in meeting the discharge requirements of MGSD.

8.2 The MGSD District Manager, Engineer or other designee of MGSD, reserves the right to make determinations of the grease interceptor adequacy and need, based on review of all relevant information regarding grease interceptor performance, facility site and building plan review and to require repairs to, or modification or replacement of such traps.

9. Enforcement.

9.1 If, an obstruction of an MGSD sewer mains(s) occurs that causes

a sewer overflow and such overflow can be attributed in part or in whole to an accumulation of grease in MGSD's sewer main(s), MGSD will take appropriate enforcement actions, as stipulated in MGSD's Sewer Use Codes, against the generator or contributor of such grease. These actions may include fines, civil penalties or a discontinuance of sewer service, or charges for any services performed by MGSD, including but not limited to services provided or performed under and pursuant to Section 6.090.

17.050 Preliminary Treatment

Where preliminary treatment, flow-equalizing facilities, or grease, oil or sand interceptors are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner and at his expense.

17.060 Control Structures

When required by the District, the owner of any property served by a sewer carrying industrial wastes shall install a suitable control structure together with such necessary meters and other appurtenances in the sewer to facilitate observation, sampling and measurement of the wastes. Such structure, when required, shall be accessible and safely located and shall be constructed in accordance with plans approved by the District. The structure shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

17.070 Measurements and Standards

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in these regulations 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.

CHAPTER 18

POWERS AND AUTHORITY OF INSPECTORS

18.010 Inspectors Permitted to Enter

Designated employees and representatives of the District shall be permitted to enter properties at reasonable times on reasonable notice for the purposes of inspection, observation, sampling and testing of sewer facilities in accordance with the provisions of this ordinance, or for any other purpose reasonably related to or connected with this Code and to insure, verify and/or enforce compliance with any and all provisions of the Code. Prior to entry for inspection of customer premises, an authorized representative or agent of District will provide reasonable advanced notice to customer of District's intent to enter and inspect. After inspection, District will provide customer with a written report of the inspection disclosing any violation of the ordinance, or any condition or circumstances which District determines will result in a billing adjustment. It is District's intent to conduct inspections at reasonable intervals including, but not limited to each time any property served by MGSD is sold, conveyed or otherwise transferred, or at any time any customer or customer account is changed to a new or different customer. If the inspection discloses that a billing adjustment is necessary or warranted to comply with

any of the billing provisions of the Code, the adjustment will be made retroactive, together with interest at the prevailing legal rate from the time the District determines, in its reasonable discretion that a billing adjustment should have been made together with a 10% penalty for any and all charges from the time that the inspection discloses an adjustment should have been made.

In the event any customer denies, prevents or otherwise obstructs access, the District retains and preserves the right to compel entry pursuant to whatever legal rights and remedies and powers it may have, and/or, in addition, and not by way of limitation, District may make whatever billing or other adjustments it determines should be made based on information available to it at the time, including the right to make the retroactive adjustments as provided for in this section. In the event any inspection discloses abandoned facilities or drains, or the customer claims that any drains or facilities are abandoned, District shall have the right to take any and all actions to insure that such facilities are disabled and abandoned, including, but not limited to, plugging or pouring concrete into drains.

CHAPTER 19
BUILDING SEWERS AND CONNECTIONS

19.010 **Permits Required to Uncover**

No person shall uncover, make any connection with or open into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the District.

19.020 **Permit to Connect Applications**

An owner desiring to make a connection to a public sewer shall make application for a permit on a form furnished by the District. The permit application shall be supplemented by any plans, specifications and other information considered pertinent by the District. An applicable connection fee, as set out in this ordinance, shall be paid by the owner to the District prior to his obtaining a building permit and before the sewer service permit is issued.

19.030 **Construction Costs and Permit Fees**

All costs of construction of the building sewer shall be paid by the owner. Costs for plan review and inspection by the District is included in the permit fee. The owner shall indemnify the District from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

19.040 **Separate Sewer for Each Building**

Except as hereinafter provided, a separate and independent building sewer shall be provided for every building. Where one (1) building stands to the rear of another on the same lot, and construction of a separate building lateral on the property is not possible, the lateral

from the front building may be extended to the rear building and the whole considered one (1) building sewer. Row homes or other buildings integrally separate shall have separate laterals if reasonably possible.

19.050 Old Sewers, Inspection and Testing

Old building sewers may be used in connection with new buildings only when they have been examined, tested and found by the District to meet all requirements of its regulations.

19.060 Gravity Building Laterals

The minimum size of a gravity building lateral shall be four inch (4") diameter. The minimum slope shall be one fourth inch (1/4") per foot for four inch (4") pipe and one eighth inch (1/8") per foot for six inch (6") pipe. Pipe materials permitted are cast-iron, PVC, or other materials approved by the District conforming to the appropriate current ASTM or ANSI/ AWWA specification for the applicable size, depth and loading conditions. Methods to be used in excavating, bedding, installation, testing, connecting to the public sewers and backfilling shall comply with the requirements for public sewers as set forth in Article XX of this article.

19.070 Inspections Required Before Backfill

All building sewers are to be inspected by authorized District personnel prior to backfill. The District shall be given twenty-four (24) hours advance notice of intent to begin construction or for backfilling.

19.080 **Location of Building Sewer, Pumping Facility Operations and Maintenance Expense**

Whenever possible, the building sewer shall be brought to the building at an elevation below the lowest floor. In buildings where any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by a pumping facility approved by the District and discharged to the building sewer. Operation and maintenance of the pumping facility shall be at the expense of the owner.

19.090 **Prohibited Connections to Sewer**

No person shall make a connection of roof downspouts, exterior or interior foundation drains, areaway drains or other sources of surface runoff or groundwater to a building sewer or building drain which is connected to a public sewer. All building sewers shall have a minimum ground cover of two feet (2') over the top of the pipe.

19.100 **Connection to Lateral**

The connection of a building lateral into a public sewer shall be made at a location approved by the District and shall, where possible, be connected to an existing "Tee" or "Wye" connection. Where no such existing "Tee" or "Wye" exists, a "saddle" manufactured expressly for the purpose of connecting to the size and material of the existing public sewer shall be used. The existing pipe shall be sawn with an approved device to produce a clean circular opening. Hammering, chiseling or any form of impact is prohibited. The entire connection shall be encased in concrete. "Wye" connections are required where there is a naturally small flow in the public sewer. After connection has been completed and so verified by the District, not less than one

(1) cubic foot of concrete is to be applied around the joint and down to undisturbed earth. All "Wyes" and "Tees" shall be placed at forty-five degrees (45) horizontal plane. Adequate provisions shall be made by owner to prevent groundwater, silt, rocks or any other debris from entering the public sewer. The full manhole run shall be balled and cleaned at the expense of the owner.

19.110 **Inspection of Laterals**

The applicant for the building lateral permit shall notify the District when the lateral is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the District's representative.

Twenty-four (24) hour advance notice shall be given to the District prior to connection.

19.120 **Guarding Excavations**

All excavations for building lateral installations 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 at least equal to its original condition. All backfill in public rights-of-way must be compacted with an approved method to a minimum of ninety percent (90%) Proctor Density.

19.130 **Clean Outs**

Clean outs shall be four inch (4") pipe or approved material laid at forty-five degrees (45) with the horizontal plane with no bends. The opening shall be flush with the ground with an approved manufactured casting with an elliptical forty-five degree (45) opening.

A twelve inch (12") wide by six inch (6") deep concrete apron shall be placed around the casting. Clean outs shall be provided at the connection between the building drain and building sewer, at each change in alignment, and where straight runs exceed one hundred fifty feet (150') in length.

19.140

Variances

When a building sewer cannot be constructed as described in the preceding subsections due to elevation restrictions or other reasons, the applicant may apply for a variance. The applicant shall submit plans and data showing the alternate methods of connection proposed. After review of the submitted material by the District's representatives, the Board will act upon the variance request. Applications for variance must be submitted at least fifteen (15) days prior to the regular monthly District meeting in order that the matter can be heard at that meeting.

CHAPTER 20

CONSTRUCTION STANDARDS FOR PUBLIC SEWERS

20.010 General

Public sewers may be constructed by the applicant or by the District at the applicant's expense. Procedures governing the appropriate requirements and agreements are set forth in Paragraph 5 of this Code.

20.020 Clearing and Stripping

The contractor shall remove all paving, sub-paving, curbing, gutters, brick, paving block, granite curbing or flagging or shall grub and clear the entire surface over the areas to be excavated and shall properly store and preserve such material as may be required for future use in backfilling, surfacing, repaving, etc. In all cases, the contractor shall machine cut in an approved width and manner all bituminous, asphaltic and portland cement concrete pavements before stripping or excavating is begun. All materials removed shall be stored in a suitable place. The contractor shall be responsible for any loss or damage to these materials if they are to be reused. Otherwise, he shall dispose of them on a disposal site secured by him.

20.030 Excavation

The contractor shall do all excavation of whatever substance encountered to a depth as indicated on the approved plans or as specified herein. Excavated materials not required or unsuitable for backfill shall be removed from the site and disposed of by the contractor on a site secured by him. Pipe trenches shall be sufficiently straight between the designated angle points to permit the pipe to be

laid true to line in the approximate center of the trench. The trench widths below the top of the pipe when laid to the required grade shall be such as to provide a free working space on each side of the pipe as laid, but shall in no event exceed the outside diameter of the barrel of the pipe plus sixteen inches (16"). Where sheeting and shoring are used, the maximum allowable width shall be measured between the closest interior faces of the sheeting or shoring as placed. Overall width of the digging mechanisms used shall in no case exceed the maximum allowable trench width. Whenever, for any reason, the maximum allowable trench width is exceeded at the top of the pipe, the contractor shall employ one or more of the following procedures as approved by the District:

1. The pipe shall be bedded in a monolithic cradle of plain or reinforced concrete having a minimum thickness of one fourth ($1/4$) the inside pipe diameter or a minimum of four inches (4") under the barrel and extending up the sides for a height equal to one half ($1/2$) the outside diameter. The cradle shall have a width at least equal to the outside diameter of the pipe barrel plus eight inches (8"). Backfill above the crown of the pipe shall be compacted carefully.
2. Provide a higher strength pipe required to withstand the increased loading on the pipe caused by the excessive trench width.
3. Install temporary sheeting and shoring while the pipe is being installed with the backfill placed and compacted to a height at least one (1) foot above the top of the pipe. Any excess

excavation carried below the required level for either the pipe or structures shall be backfilled to the proper depth at the contractor's expense with three-quarter inch (3/4") open graded aggregate and thoroughly tamped. Unstable soil in the bottom of excavations shall also be removed and replaced with tamped three-quarter inch (3/4") open graded aggregate. In wet trench conditions, minimum size one and one-half inch (1-1/2") aggregate shall be used. The District shall determine the depth of removal of unstable soil. The contractor shall notify the District when excavations for structures or pipe lines are completed, and no concrete shall be deposited, nor pipes installed, until the excavations have been approved by the District.

20.040 Sheeting and Shoring

The contractor shall support the sides of all excavations, in accordance with all applicable laws and governing safety regulations, with approved sheeting, sheet-piling, braces, shoring and stringers. Such sheeting, where damage may result through removal, shall be left in place. The right of the District to order sheeting, etc., left in place, shall not render the issuance of such orders obligatory on the part of the District. All sheeting shall be arranged so that it may be withdrawn as the trenches are backfilled without injury to the pipe and its appurtenances and without injury to, or settlement of, adjacent structures, pavements and other public or private property. Sheeting shall not extend to the bottom of the trench, but only to the top of the pipe unless soil conditions require otherwise. All voids caused by

withdrawal shall be immediately filled with sand or other satisfactory material and compacted by ramming or other methods satisfactory to the District. If the material and equipment used for sheeting and shoring is not of proper size or quality, or not properly placed, the contractor shall furnish and place other satisfactory material in an acceptable manner.

20.050 **Length of Open Trench in Street Areas**

No trench at any single location shall be opened or left open more than three hundred (300) linear feet in advance of where backfilling and surfacing have been completed. Surfacing as noted above shall mean crushed stone trench topping and may mean temporary or permanent asphaltic resurfacing, if required. All surfacing requirements shall conform to applicable town, district or county requirements. If the work is delayed on the whole, or any part of the project, and excavations are left open for more than three (3) consecutive days, then the contractor shall acceptably backfill the excavations and temporarily repave over the same if required, at his own expense, and he shall not again open the trench or part thereof until he is ready to proceed with construction of the pipeline. If the contractor shall neglect or fail to completely refill such trench or excavation and temporarily repave over the same within twenty-four (24) hours after notice to do so, then the District shall be authorized to order refill and temporarily surface such trenches by others, and the costs shall be charged to the contractor.

20.060 **Location of Underground Utilities**

The accuracy and/or adequacy of existing underground utilities and

drain lines shown on the plans from information provided by the District is not guaranteed, but indicates their location according to the best knowledge of the District. The contractor shall inform himself by personal contact with the utility companies affected, of the exact location of all conduits, ducts, cables, pipe systems and drain and other lines, and shall protect them as required. Any necessary permits or fees in connection with such work shall be obtained and paid for by the contractor. All inspection, testing and engineering costs shall be borne by the owner, contractor or developer. Any damage to any such utilities, including lateral or main sewers of the District, caused by operations of the contractor shall be repaired by the contractor at his expense.

20.070

Dewatering

Dewatering, sufficient to maintain the groundwater level at or below the surface of the trench bottom or base of the bedding course, shall be accomplished prior to pipe laying and jointing. The dewatering operation shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the trench. The normal water table shall be restored to its natural level in such a manner as to not disturb the pipe and its foundation. Water pumped from excavations shall be disposed of by the contractor in such a manner as will not cause injury to public or private property or constitute a nuisance or menace to the public. At all times, the manner employed to discharge and to dispose of water pumped from an excavation shall be subject to the approval of the District. All surface waters shall be prevented from entering open ditches or excavations by proper grading of the

ground surface in the vicinity of the excavation.

20.080 Maintaining Rights-of-Way

Work shall be so conducted as to cause a minimum of inconvenience to pedestrian and vehicular traffic and to private and public properties along the line of work. When specifically directed by the District, the contractor shall complete the work in private and public rights-of-way up to a designated point before continuing with further work in order to give required access to local facilities and property. It shall be the duty of the contractor during the progress of the work to maintain crossings, walks, sidewalks and other roadways open to traffic in a satisfactory condition and to keep all fire hydrants, water valves, fire alarm boxes and letter boxes accessible for use. Whenever it is necessary to maintain pedestrian traffic over open trenches, safe timber bridges at least three (3) feet in width and equipped with side railings shall be provided. Where the trench is so close to the curb line that the excavated material would encroach upon the sidewalk or private property, the District may order the contractor at the contractor's expense to erect a plank fence together with other necessary lumber so placed to keep the sidewalk and property clear. In important thoroughfares, highways or in narrow streets, the material excavated from the trench shall, if the District so directs, be removed from the site of the work at the contractor's expense as soon as excavated in order to provide suitable space for traffic. The contractor shall, at his expense, bring back as much of the material as necessary to properly refill the trench or if so directed by the District, he shall, at his expense, furnish such other suitable materials as may be

necessary to complete the work. When it is necessary to haul excavated material over the streets near the job location, the contractor shall provide suitable type vehicles and shall promptly and thoroughly clean up all material dropped on streets and highways outside of the immediate trenching area.

Guard rails and other highway and street structures disturbed or altered in any way by the construction activities shall be promptly restored to a condition equal to or better than original and shall be replaced in proper alignment. Facilities discolored in any way by the construction activities shall be refinished by the contractor by washing or repainting as necessary.

20.090 Sewer Pipe Materials Permitted

1. PVC Gravity Sewer Pipe

PVC pipe and fittings for sewers and laterals shall conform to ASTM Specification D-3034 (SDR35). The pipes and fittings shall be made of PVC plastic having a cell classification of 12454-B or 12454-C or 13364-B (with a minimum tensile modulus of 3450 MPa (500,000 psi)) as defined in ASTM Specification D1784. Compounds that have different cell classifications because one or more properties are superior to those specified are also acceptable.

All pipe delivered shall be accompanied by a Certificate from the manufacturer attesting that the pipe furnished by him complies with applicable ASTM requirements.

The pipe and fittings shall be homogeneous throughout and free from cracks, holes, foreign inclusions or other injurious defects.

All PVC pipes and fittings shall be clearly marked designating

manufacturer's name, pipe size, SDR and ASTM. All pipe joints shall conform to ASTM Specification D-3212. All seals shall be by means of flexible watertight elastomeric seals that conform to the requirements of ASTM Specification F-477. The two (2) types of joints utilized to effectuate water tightness through compression of an elastomeric seal are a push-on type and mechanical joint. When a mechanical joint is utilized, the pipe spigot shall not be deformed or collapse when the fitting is tightened.

When a field cut of the PVC pipe is required, the end shall be cut square, beveled, and depth of full insertion marked on the pipe in accordance with the manufacturer's specification to insure proper fit in the gasketed bell.

2. Alternate Pipe Materials

Alternate pipe materials will be considered when the following conditions are met:

- a. Pertinent data must be submitted to the District sufficiently in advance to permit proper review.
- b. A substantial savings in costs or other benefits to MGSD must be realized in utilizing the alternate material.
- c. Certified statements must be obtained from five (5) municipal districts or cities with at least five (5) years of maintenance experience with the alternate material.
- d. Certified laboratory tests on the alternate pipe material must be furnished to the District.

20.100

Pipeline Installation

1. All pipe shall be laid true to line and grade as shown on the

plans by methods to be approved by the District.

2. No larger diameter pipes than is required for the number of units served shall be allowed unless a greater area will be served by the pipe in the future or the District requires a larger diameter for future extension. In the event that a larger pipe is used, the design criteria must be based on a velocity of 2 feet per second (fps) at ½ full pipe using a Manning 'n' equal to 0.013.

3. All gravity pipelines shall be laid to the following minimum slopes:

Pipe Diameter	Number of Equivalent Units Served	Minimum Slope
*8"	10 or less	1.00%
**8"	11-20	.60%
**8"	Above 20	.40%
10"		.30%
12"		.22%
15"		.15%
18" and up		2 fps @ ½ full

Deviations from this table must be applied for as a variance and special provisions may be required by the District.

* When 10 or less EDUs are served, such as a blind cul-de-sac or other location where no extension of the sewer is possible, the District may allow a 6" pipe with a minimum slope of 1.00%.

** When 8" pipe cannot be laid at the required minimum slope, an engineered system may be allowed where calculations demonstrate the ability of the system to meet a flow velocity of at least 1.5 fps. Such engineered systems are allowed only with prior written approval from the District taking into consideration the calculations submitted and signed by a licensed professional engineer and the alternatives presented such as but not limited to the availability to increase the slope of the pipe, the length of the sewer line, the location of the sewer line, the feasibility and accessibility for

maintenance and cleaning of the sewer line and any other criteria which would be of impact on the District once the sewer line has been accepted.

4. Access for Cleaning

Sufficient access must be maintained for sewer cleaning operations.

20.110 Laying PVC Pipe

Following the trench preparation, pipe laying shall proceed upgrade with pipe laid carefully, hubs upgrade, spigot ends fully entered into adjacent hubs, and true to lines and grade. Every pipe shall be carefully inspected before laying, and any pipe section containing cracks or other defects shall not be used. Every section of pipe shall rest upon the pipe bed for its full length. Each pipe shall be firmly held in position so that the invert forms a continuous grade with the invert of the pipe previously placed. The interior of all pipes and the inside of the bell and outside of the spigot shall be thoroughly cleaned of all foreign matter before lowering into the trench and shall be kept clean during the laying operations. Under no conditions shall pipe be laid in water or on a subgrade containing frost and no pipe shall be laid when trench conditions are unsuitable for work. In all cases, water shall be kept out of the trench until concrete or supports, where used, have hardened.

Walking or working on the completed pipe line shall not be permitted until the trench has been backfilled to a height of at least one foot (1') over the top of the pipe.

Any pipe that has its grade or alignment disturbed after laying shall be taken up and re-laid. Any section of pipe already laid and found to be defective shall be taken up and replaced with new pipe.

All joints shall be watertight, and any leaks or defects discovered shall be immediately repaired. Bell and spigot surfaces should be cleaned

of dirt and foreign matter before application of lubricant compound as called for by the manufacturer. Pipe installation shall conform to the manufacturer's specifications.

The underground installation of all PVC gravity sewer pipe shall be in accordance with ASTM Specifications D2321 and the approved plans and specifications.

20.120 Pipeline Bedding

The following graded bedding material shall be used in dry trenches only:

U.S. Standard Sieve Size	Percent by Weight Passing
	1/2" 100%
No. 4	90-100%
No. 16	30-75%
No. 200	0-10%

The following graded bedding material shall be used in wet trenches only:

U.S. Standard Sieve Size	Percent by Weight Passing
1-1/2"	100%
1"	50-90%
3/4"	30-70%
3/8"	10-40%
No. 4	5-25%
No. 200	0-10%

A minimum of four inches (4") in dry trenches and six inches (6") in wet trenches of bedding material shall be placed under the pipe being installed and then brought up in four-inch (4") lifts to the center of the pipe. Each lift shall be compacted by an approved method. Bedding material as herein specified shall be used for mainline pipe and laterals.

The District may consider minor adjustments from the specified bedding gradations if requested in sufficient time to allow proper analysis by the District's Engineer. Such analysis will take into account not only the proposed bedding gradation but also conditions and gradation of the surrounding natural soils. Any such adjustments, if approved, will not relieve the Contractor from the responsibility of providing and guaranteeing a proper installation and any failure of the installation will remain the responsibility of the Contractor.

20.130 Backfilling Trenches

The following requirements for backfilling of trenches is intended to specify materials and methods which will result in maximum compaction of the backfilled material without displacing the sewer grade and alignment. If displacement of the sewer or settlement of the backfilled material does occur, it will be considered conclusive evidence of improper backfilling procedures and/or the placement of unsuitable backfilling materials, and it shall be the contractor's responsibility to remove the backfilled material, regrade and realign the sewer and re-backfill and re-compact the trench.

The procedure for backfilling shall be as follows:

After the sewer has been installed and required pipe bedding or pipe envelope properly placed, sand or decomposed granite shall be deposited and carefully tamped with mechanical tampers to a height at least one foot (1') above the top of the sewer. From a point one foot (1') above the top of the pipe to the top of the trench, town, district, county standards and inspections will be complied within all areas where applicable. In those instances where these standards do not apply, from a point one foot (1') above the top of the pipe to the top of the trench the backfill classes as called out on the Typical Trench Section Detail B and procedures as specified below shall be used. Class A or B backfill applies to all cuts made in existing or proposed street and alley rights-of-way.

Class C, D or E backfill applies to all cuts made through easements or other public areas where no street or alley is anticipated.

Class A or B Backfill

The material as specified shall be placed in lifts not exceeding eight inches (8") in depth, and each layer or lift shall be leveled off, moistened and thoroughly compacted to a relative density of not less than ninety percent (90%) before the succeeding lift is installed.

Compaction shall be obtained by hand tamping or with the use of approved mechanical compaction equipment. If clean gravel is used as Type A backfill material, the trench may be filled to subgrade and thoroughly jetted until settlement takes place. The trench shall then be refilled and jetting or flooding continued until required compaction has been obtained. Should jetting or flooding fail to produce the proper compaction, mechanical tamping will be required in addition

to the jetting.

Class C, D or E Backfill

Material as specified shall be placed in layers not exceeding twelve inches (12") in thickness, and each layer shall be leveled off, moistened and compacted to a relative density of not less than eighty percent (80%) before the succeeding lift is installed. Compaction may be obtained by watering or approved tamping, depending on the type of the backfill material. The final layer shall be thoroughly rolled or otherwise compacted so as to leave the surface over the trench in a uniformly smooth condition conforming to the surrounding area. All excess material shall be removed.

20.140

Manholes

All manholes shall be constructed of precast reinforced concrete manhole sections conforming to ASTM Designation C478. All joints between precast sections shall use two applications of Con Seal, Ramnek, or other approved jointing compound with a primer as recommended by the manufacturer. All manholes must be watertight. All pipe stubs or fittings shall have approved elastomeric seals conforming to ASTM F-477 or ASTM C923.

All bases must be precast unless otherwise approved by the District. Inverts shall be formed directly in the concrete of the manhole base and shall be smooth and accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer sections. At the top of the pipe elevations, the manhole bottoms shall retain a slope of 6:1. Changes in size and grade shall be made gradually and evenly.

Changes in the direction of the sewer and entering branches shall have a true curve of as large a radius as the size of the manhole will permit. Steep slopes outside the invert channels shall be avoided. Manholes shall have a minimum of four feet (4') interior diameter. Larger manholes may be required for pipe in excess of fifteen inches (15") diameter. Pipe invert channels shall extend completely to the manhole interior faces.

If cast-in-place bases are utilized, precast manhole sections shall be embedded a minimum of 6 inches into fresh concrete of the base pour. Concrete for cast-in-place bases shall be Class AA or DA with a 28-day compressive strength of 3000 psi. Concrete shall be placed to not less than 6 inches in thickness below the bottom of the pipe and to 12 inches beyond outside of the precast manhole section. All pipe stubs shall have approved rubber ring joints to allow for movement, shall not protrude more than 18 inches beyond the manhole exterior and shall be included in the monolithic base pour. (See section on manholes with PVC connections for special precautions necessary to insure a watertight seal.)

Excavation for manholes shall be made to vertical plane at least one foot (1') outside of the manhole walls to provide proper work space. Asphaltic cement pavement, concrete driveways, valley gutter or curb and gutters shall be saw cut to a rectangular shape with dimensions two feet greater than the outside dimension of the manhole to be installed. Bedding under the manhole base shall be the same as required for the adjacent trench section or may be 12-inches of 3/4-inch gravel.

Spaces outside the manholes shall be backfilled with acceptable material in uniform layers not exceeding eight inches (8") in depth. Each layer shall be thoroughly compacted mechanically to the density of the earth in the adjacent banks or trench section.

In manholes where the depth exceeds 4 ½ feet to top of pipe, the Contractor shall furnish and set manhole steps. Such steps shall be spaced 12-inches apart vertically and shall be; 1) galvanized wrought iron conforming to ASTM designation A207, hot dip galvanized after fabrication; 2) steel reinforced polypropylene; or 3) aluminum alloy steps.

All manholes shall use concentric cones except where the manhole interior diameter is 60" or greater eccentric cones shall be used. The use of flat top manholes must be approved by the District.

A twenty-four inch (24") diameter clear opening cast iron frame and cover which is manufactured from gray cast iron conforming to ASTM Specification No. A-48 Class 30, and designed for a minimum HS-20 traffic loading shall be used. The frame and cover shall have matching machined seating surfaces, one (1) pick hole and one (1) centrally located one-inch (1") dig hole, and shall have no "thru" holes. All manholes shall be identified as "Sewer" clearly displayed on the cover. No more than two (2) four-inch (4") high grade rings shall be allowed under the cover.

A minimum 6-inch thick concrete collar shall be installed around the frame and cover and shall be a minimum of five feet in diameter.

Where manholes are not located in streets, alleys, or other finished areas, the top of the manhole shall be installed 12 inches above the

adjacent ground level with a concrete collar at least 5 feet in diameter unless otherwise required by MGSD.

In these cases, install the concrete collar from the top of the cover frame and extending a minimum of 4 inches below the surrounding ground surface. Taper the concrete collar from top to bottom to a 1:1 slope or flatter.

Manholes shall be spaced no further apart than allowed by the following table:

Maximum Distance Between Manholes

Diameter of Pipe (inches)	Spacing Between Manholes (feet)
6"	300'
*8" - 10"	300'
12"	400'
15" or larger	Will be reviewed individually

* When physical as well as legal access is available from both ends of the manhole run, the District may allow the distance between manholes extended to a distance not to exceed 400'.

No clean-outs will be permitted on public sewers. Manholes are required at the end of all pipeline runs.

Manholes with PVC Connections

Manhole connections shall be watertight. The connection of PVC sewer pipe to manholes cannot be effectively achieved with concrete without special preparation. The dimension change of PVC due to thermal expansion and contraction is approximately five times greater than that of concrete. Because of this, a watertight seal must utilize a

flexible elastomeric gasket material capable of accommodating the differential expansion and contraction.

The manhole bases shall be precast, reinforced concrete manhole sections with connection port with elastomeric seals precast into the manhole base. Cast in place bases or other types of seals may be used only if specifically approved by the District. Approval by the District of any alternate methods shall not relieve the contractor of the responsibility to provide water tight connections.

20.150 Appurtenances and Special Construction

1. Where closed excavation is encountered, the contractor shall use a method approved by the District and in all cases, the sewer pipe shall be encased in a steel pipe of sufficient diameter to allow proper installation of the sewer pipe. The void between the sewer and the casing pipe shall be completely filled with sand. Any spaces between the steel casing and the excavation shall be filled by pressure grouting with two thousand (2,000) psi mortar.
2. All sewer stream crossings shall have two feet (2') clearance between stream bottom and concrete top. All sewer pipe shall be encased with minimum six inch (6") thick concrete all around.
3. Any manhole where the invert of the incoming pipe exceeds by two feet (2') the elevation of the outgoing shall have a drop structure. The drop line shall be constructed outside of the manhole and attached monolithically to it. A clean-out shall be provided in the manhole. The drop connection shall enter the manhole at the elevation of 0.1 feet above the outgoing pipe.
4. All special structures, appurtenances and other conditions not

otherwise specified or alluded to in this ordinance shall be considered for approval only after application has been made in writing to the District fifteen (15) days prior to its regular monthly meeting with complete proposed plans and specifications detailing the special conditions. Not later than sixty (60) days after such application has been properly submitted complete with all required information, the District will either approve, disallow or recommend approval subject to recommended changes by the District.

20.160 **Testing**

At a time mutually arranged between the contractor and the District (which may be during the construction operations, after completion of a substantial and convenient section of the work or after completion of all construction) the contractor shall furnish all necessary labor, materials and equipment and shall perform any or all specified tests for each and every length of sewer and each item of appurtenant construction as outlined below. When other underground utilities are to be installed as a part of the construction or as a part of a larger project or subdivision related to the sewer installation, testing shall be conducted after all other utilities have been installed in the area of the new sewer line and laterals. This does not preclude the contractor from also conducting testing at earlier times to insure to himself that the lines were acceptably in-stalled prior to other utility work in the area. All tests shall be performed under the direct supervision of the District or its authorized representatives. Any remedial work required to correct construction deficiencies discovered as a result of any official test or inspection shall be accomplished by the contractor in a manner

approved by the District and at the sole expense of the contractor. Portions of the original construction which require remedial work shall be completely retested and/or reinspected following the attempted rectification by the contractor.

Prior to final approval by the District, all sewer mains and appurtenances shall be subjected to a test or tests that will determine their degree of water tightness and test or tests that will ascertain the correctness of their horizontal and vertical alignment. Before any test is performed, the pipe installation shall be cleaned in the following manner:

The contractor shall furnish an inflatable spherical rubber ball of a size that will inflate to fit snugly into the pipe to be tested. The ball shall be placed in the uppermost manhole on the pipe to be cleaned, and water shall be introduced behind it. The ball shall pass through the pipe with only the force of the water impelling it. All debris flushed out ahead of the ball shall be removed at the first manhole where its presence is noted. In the event cemented or wedged debris or a damaged pipe shall stop the ball, the contractor shall remove the obstruction and/or make necessary repairs.

Any one or all of the following tests may be required:

1. Alignment Test/Visual Test

Each line shall be lamped between manholes. At least one-half (1/2) of full pipe shall be visible from manhole to manhole. Any deviation noted may require the contractor to reconstruct that portion of the sewer line.

2. Infiltration Test

The test of water tightness, aimed at locating points of excessive infiltration, shall be performed on divisions of the sewer system specified by the District. The contractor shall test each single manhole section of pipe, groups of manhole sections or the complete system in a test pattern established by the District. If there is a definite and recognizable leakage of water into the specified sewer line or manhole, then the test fails and reconstruction may be required. The pipe or pipes leading into the most elevated point of the test section shall be completely plugged by the contractor with approved mechanical stoppers so that no leakage flow from other sections of sewer is delivered into the test section. All intermediate branch mains not included in the sewer section to be tested shall be likewise securely plugged. The contractor shall install an approved ninety degree (90) V-notch weir or other acceptable measuring device in the manhole at the lowest point in the sewer test section and accurately measure and record the flow of leakage from the test section. The flow measurements shall be made and recorded at approved periodic intervals during a total test time of not less than four (4) hours. A single manhole section shall not be acceptable if the infiltration into it exceeds the rate of one hundred (100) gallons per inch nominal diameter of main pipe per mile of length in twenty-four (24) hours. A group of one (1) or more manhole sections, or the complete system of sections as an average, shall not be acceptable if the infiltration into it exceeds the rate of one hundred (100) gallons per inch

nominal diameter of main pipe per mile of length in twenty-four (24) hours.

3. Exfiltration Test

Where the sewer line is near or above the water table, an exfiltration test shall be used. All pipes leading into the specified sewer test section shall be completely plugged by the contractor with mechanical stoppers so that no water introduced into the section can escape through the mains, branch sewers or service laterals. The contractor shall then fill the test section with water and continue to introduce water into the section until a static head of water four feet (4') above the invert of the pipe or pipes at the most elevated point of the test section has been established. The contractor shall then measure and record at approved periodic intervals a total test time of not less than four (4) hours, the volume of water added to the test section in order to maintain a total static head of water four feet (4') above the highest pipe invert elevation. A single manhole section shall not be acceptable if the exfiltration from it exceeds the rate of one hundred (100) gallons per inch nominal diameter of main pipe per mile of length in twenty-four (24) hours. A group of one (1) or more manhole sections, or the complete system of sections as an average, shall not be acceptable if the exfiltration from them exceeds the rate of one hundred (100) gallons per inch nominal diameter of main pipe per mile of length in twenty-four (24) hours.

4. PVC Sewer Pipe Test

Following the ball test for cleaning and identifying major pipe defects and the alignment tests described in Section 20.160.1, the following tests shall proceed:

Air Test

Unless otherwise specified, the contractor shall furnish all the necessary equipment and be responsible for conducting all low pressure air tests. In addition, the contractor is responsible for any necessary repair work on sections that do not pass the test. No sealant shall be used in any newly installed sewer without the prior approval of the engineer. The engineer and/or a qualified inspector shall witness all low pressure air tests and verify the accuracy and accept-ability of the equipment utilized. To facilitate test verification by the inspector, all air used shall pass through a single above ground control panel.

The above ground air control equipment shall include a shut-off valve, pressure regulating valve, pressure relief valve, input pressure gauge and a continuous monitoring pressure gauge having a pressure range from 0 to at least 10 psi and an accuracy of plus or minus 0.04 psi.

Two (2) separate hoses shall be used to: (1) connect the control panel to the sealed line for introducing low-pressure air and (2) a separate hose connection for constant monitoring of air pressure build-up in the line. This requirement greatly diminishes any chance for over-pressurizing the line.

After a manhole to manhole reach of pipe has been backfilled to

final grade and prepared for testing, the plugs shall be placed in the line at each manhole (and the end of each lateral if required) and secured.

Low pressure air shall be slowly introduced into the sealed line until the internal air pressure reaches 4.0 psig greater than the average back pressure of any groundwater above the pipe, but not greater than 9.0 psig.

The depth of groundwater above the pipe shall be determined by the installation of shallow groundwater wells in the pipe trench. The number of wells shall be specified by the District and the contractor's design approved by the District prior to start of construction. In the event that the contractor desires to use a different method to determine the depth of groundwater, the District must be consulted and approve the method.

After a constant pressure of 4.0 psig (greater than the average groundwater back pressure) is reached, the air supply shall be throttled to maintain that internal pressure for at least two (2) minutes.

When temperatures have been equalized and the pressure stabilized at 4.0 psig (greater than the average groundwater back pressure) the air hose from the control panel to the air supply shall be shut off or disconnected. The continuous monitoring pressure gauge shall then be observed while the pressure is decreased to no less than 3.5 psig (greater than the average back pressure of any groundwater over the pipe). At a reading of 3.5 psig to 4.0 psig (greater than the average

groundwater back

pressure) timing shall commence with a stop watch or other accurate timing device.

If the time shown in Table I or in Table II for the designated pipe size and length elapses before the air pressure drops 1.0 psig (or 0.5 psig), the section undergoing test shall have passed and shall be presumed to be free of defects.

If the pressure drops 1.0 psig (or 0.5 psig) before the appropriate time shown in Table I or in Table II has elapsed, the air loss rate shall be considered excessive and the section of pipe has failed the test.

The test time criteria requires that no test section shall be accepted if it loses more than 0.0015 cubic feet per minute per square foot of internal pipe surface area for any portion containing less than six hundred twenty-five (625) square feet internal pipe surface area.

TABLE I
SPECIFICATION TIME REQUIRED FOR A 1.0 PSIG PRESSURE DROP
FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q = 0.0015

1 Pipe Diameter (in.)	2 Minimum Time (min:sec)	3 Length For Minimum Time (ft.)	4 Time For Longer Length (sec.)	Specification Time for Length (L) Shown (min:sec)								
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft	
4	3:46	597	.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24	17:48
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48	25:38
12	11:20	199	3.418 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38	40:04
15	14:10	159	5.342 L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04	57:41
18	17:00	133	7.692 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	78:31
21	19:50	114	10.470 L	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31	102:33
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33	129:48
27	25:30	88	17.306 L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48	160:15
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15	193:53
33	31:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53	230:46
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46	

TABLE II
SPECIFICATION TIME REQUIRED FOR A 0.5 PSIG PRESSURE DROP
FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q = 0.0015

1 Pipe Diameter (in.)	2 Minimum Time (min:sec)	3 Length For Minimum Time (ft.)	4 Time For Longer Length (sec.)	Specification Time for Length (L) Shown (min:sec)								
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft	
4	1:53	597	.190 L	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	.427 L	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12	5:42
8	3:47	298	.760 L	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42	8:54
10	4:43	239	1.187 L	4:43	4:43	4:43	4:57	5:56	6:55	7:54	8:54	12:50
12	5:40	199	1.709 L	5:40	5:40	5:42	7:08	8:33	9:58	11:24	12:50	20:02
15	7:05	159	2.671 L	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02	28:51
18	8:30	133	3.846 L	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51	39:16
21	9:55	114	5.235 L	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16	51:17
24	11:20	99	6.837 L	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17	46:54
27	12:45	88	8.653 L	14:25	21:38	28:51	36:04	43:16	50:30	57:42	46:54	80:07
30	14:10	80	10.683 L	17:48	26:43	35:37	44:31	53:25	62:19	71:13	80:07	96:57
33	15:35	72	12.926 L	21:33	32:19	43:56	53:52	64:38	75:24	86:10	96:57	115:23
36	17:00	66	15.384 L	25:39	38:28	51:17	64:06	76:55	89:44	102:34	115:23	

For pipe installation in groundwater, additional PSI is required during air test.

This is calculated by: $\frac{\text{Number of feet of water above pipe}}{2.31}$ Example: $11 \div 2.31 = 4.76$

¹Tables excerpted from Uni-Bell Plastic Pipe Association "Uni-B-6".

General Test Time Formula

$$T = 0.085 \frac{DK}{Q}$$

T = Shortest time, in seconds, allowed for the air pressure to drop 1.0 psig.

K = 0.000419 DL, but not less than 1.0

Q = 0.0015 cubic feet per minute per square feet of internal surface

D = Nominal pipe diameter in inches

L = Length of pipe being tested in feet

It is often convenient to include connected lateral sewers when testing sewer mains having lateral sewers. If lateral sewers are included in the test, their lengths may generally be ignored for computing required test times.

In the event a test section having a total internal surface area less than six hundred twenty-five (625) square feet fails to pass the air test when lateral sewers have been ignored, the test time shall be recomputed to include all lateral sewers using the following formula:

$$T = 0.085 \frac{D(1)^2(L)1 + D(2)^2L(2) + \dots + D(n)^2L(n)}{D(1)L(1) + D(2)L(2) + \dots + D(n)L(n)} \frac{K}{Q}$$

T = Shortest time, in seconds, allowed for the air pressure to drop 1.0 psig

K = 0.000419 (D(1)L(1) + D(2)L(2) + ... + D(n)L(n)), but not less than 1.0

Q = 0.0015 cubic feet per minute per square feet of internal surface

D(1),D(2), etc. = Nominal diameters of the different size pipes being tested.

If the recomputed test time is short enough to allow the section tested to pass, then the section shall be presumed to be free of defects and comply with this specification.

Deflection Test

This test may be required on all or selected sections of the project area. A deflection test limit of 7.5% of the pipe base inside diameter is adopted. This test shall be conducted under the direct supervision of the District personnel using a properly sized "go no-go" deflection mandrel constructed in accordance with ASTM specification D-3034. The mandrel shall be furnished by the contractor and meet with MGSD's approval. The mandrel shall be hand pulled through the pipe. No devices except the tow rope can be utilized to assist the mandrel through the pipe. Locations with excessive deflection shall be repaired. The following table lists pipe and 7.5% deflection mandrel sizes:

7.5% Deflection Mandrel Dimension

Pipe Size, Inches	Base Inside Diameter, Inches	7.5% Deflection Mandrel Diameter Inches
6	5.742	5.31
8	7.665	7.09
10	9.563	8.84
12	11.361	10.51
15	13.898	12.86

20.170

Guarantee

The Contractor shall guarantee the work against unsatisfactory conditions due to defective equipment, materials, or workmanship for a period of one (1) year from the date of final acceptance of the work by the District. Final acceptance shall require that all conditions of acceptance, if any, have been met, and reproducible record drawings have been approved and delivered to the District.

CHAPTER 21

PUMP STATIONS AND FORCE MAINS

21.010 No Pump Stations Where Gravity Sewer Main Possible

Pump stations are not permitted where a gravity connection can be made to an existing gravity sewer main of the District. Temporary pump stations may be considered by the District only after all pertinent information has been submitted to the District at least fifteen (15) days prior to their regular meeting.

21.020 Location of Pump Station

Sewage pump stations shall be located and designed to serve the greatest practical tributary area so as to minimize the number of pump stations. Pump stations should be dry well type except for individual building connections. Adequate access for service vehicles and appropriate construction equipment to facilitate repairs shall be provided. Pump stations shall be either built-in-place or be factory-built units meeting all requirements set forth herein. Structures shall be safe against vandalism, and pump station sites shall be enclosed with six feet (6') high chain link fence of industrial quality. Sites shall be paved, drained and landscaped. A stand-by engine driven generator shall be provided with automatic starting and load transfer equipment to operate the station during power failure, unless automatic overflow into a gravity sewer line can be provided at an elevation that insures no back-ups in the collection system served by the station to cause surface overflows or backing-up into any connected buildings. Careful consideration shall be given to control

odors and noise.

21.030 Station Capacity

Station capacity shall be adequate to serve the anticipated ultimate-peak flow from its tributary area. Effects of initial low flows or minimum design flows must be considered in the design. At least two (2) independent pumps and motors, each having the total station capacity, shall be provided.

21.040 Wet Well Design

Wet well design shall minimize retention times of sewage, avoid short cycling of pumps, and prevent segregation of sewage solids. Proper facilities for ventilation, access and maintenance shall be provided. Minimum water levels shall remain above the pump volute; suction lifts will not be permitted. Bottom slopes shall be at least forty-five degrees (45), and no pockets for deposition of solids shall be permitted. A sluice gate shall be provided at the incoming sewer allowing shutoff of all inflows.

21.050 Pump Type Capacity and Design

Pumps shall be of the non-clog centrifugal type and be at least four-inch (4") size designed to handle sewage and shall not operate in excess of 1750 RPM. Pumps shall be equipped with mechanical seals. Pneumatic ejectors will not be permitted. Suction line velocities shall not exceed 5 fps and discharge piping velocities shall not exceed 8 fps.

21.060

Dry Wells

Dry wells shall be equipped with adequate lighting, ventilation, sump pump, dehumidification equipment and safe access ladders. Control equipment shall include appropriate alarms to warn of station malfunctions. The design of pump stations shall meet all federal, state and local requirements and shall in general follow the requirements of WPCF Manual of Practice No. 9.

21.070

Discharge Force Mains

Discharge force mains shall be of epoxy lined cast iron or steel, or pressure rated PVC pipes. Pipe classes shall conform to the applicable ASTM specifications for the particular pressure with a continuous rise to the discharge manhole to prevent air pockets. Where this is not possible due to topographic or other reasons, air release valves shall be installed at all high points. Air release valves shall be located in accessible underground vaults, and their design shall be subject to District approval. Force main terminals shall be designed to assure smooth flowing discharge into the receiving gravity sewer.

CHAPTER 22

ADJUSTMENTS EXCEPTIONS AND CONFLICTS

22.010 Adjustments and Exceptions

The Board of Directors of the Minden-Gardnerville Sanitation District retains the right to grant adjustments and exceptions to the provisions of this ordinance in order to vary or modify the strict application in cases where there are practical difficulties or unnecessary hardships. Application for any adjustments or exceptions shall be made to the Board of said District in the form of a written application not later than fifteen (15) days prior to a regular District meeting. The District reserves the right to permit or require minor non-material modifications, alterations or additions or to relax or limit any technical requirements on a case by case basis in its sole discretion to accommodate the District and the public interest.

22.020 Conflicting Provisions

In the event that two (2) or more provisions of this ordinance are in conflict, or if this ordinance is silent, confusing, ambiguous, oppressive or unworkable, by reason of its application or non-application, or does not otherwise meet any situation presented to the District, the District reserves the right to adopt a resolution in order to meet or solve such situations.

CHAPTER 23
ORDINANCE IN FORCE

23.010 This revised and restated code of Minden-Gardnerville Sanitation District shall be in full force and effect from and after its public hearing, passage, approval, recording and publication as provided by law.

CHAPTER 24
STANDARD DETAILS

- 24.010** The following MGSD Standard Details shall be complied with:
1. Detail 'A' - Standard Manhole
 2. Detail 'B' - Typical Trench Section
 3. Detail 'C' - Drop Manhole
 4. Detail 'D' - Typical Sewer Lateral
 5. Detail 'E' - Lateral Observation Tee
 6. Detail 'F' - Dumpster Pad Drain
 7. Detail 'G' - Sewer Lateral Clean Out
 8. Detail 'H' - Sewer Service Saddle
 9. Detail 'I' - Type 1 & 2 and Type 1 & 2 Modified Manholes
 10. Detail 'J' - Type 4 Manhole
 11. Detail 'K(a)' - Grease Interceptor Detail
 12. Detail 'K(b)' - Grease Interceptor Sizing Worksheet