# TABLE OF CONTENTS

1.0	.0 DEFINITIONS		
2.0	WA	TER AND SEWER SERVICE	2-1
2.1	Ser	/ice	
2.	1.1	Application for New Service	
2.	1.2	Change in Customer's Equipment or Operations	2-2
2.	1.3	Installation of Services	
2.	1.4	Maintenance of Services	
2.	1.5	Connection Charges	
2.	1.6	Number of Services to Separate Premises	
2.	1.7	Unauthorized Alterations	2-6
2.	1.8	Resale of Water	2-6
2.	1.9	Cross-Connection Protective Devices on Water Service Connections	
2.	1.10	Right of Access to Premises of Customer	
2.	1.11	Responsibility for Loss or Damage	
2.	1.12	Responsibility for Equipment	2-7
2.	1.13	Pools and Tanks	2-7
2.	1.14	Services Used Without Application Being Made	2-7
2.	1.15	Damages Through Leaking Pipes and Fixtures	
2.2	Ren	dering and Payment of Bills	2-8
2.	2.1	Rendering of Bills	
2.	2.2	Payment of Bills and Penalty for Non-payment	2-8
2.	2.3	Application of Payments	
2.	2.4	Disputed Bills	2-9
2.	2.5	Customer Request to Turn Off Water During Non-Business Hours	2-9
2.	2.6	Prepayment Discount	2-9
2.3	Info	rmation Available to the Public	2-9
2.	3.1	General Information	
2.	3.2	Rates	2-10
2.4	Dise	continuance of Service	2-10

2.4.1	Water Service	
2.4.2	Sewer Service	2-11
2.5 Re	estoration of Service	2-13
2.5.1	Reconnection charge	2-13
2.5.2	To be made during regular working hours	2-13
2.5.3	Restoration of sewer service	2-13
2.6 Re	fusal to Serve	2-13
2.6.1	Conditions for refusal	
2.6.2	Notification to Customers	2-14
2.7.	Continuity of Service	2-14
2.7.1	-	
2.7.2		
2.7.3		
2.8 Se	rvice to Users Outside District Limits	2 15
2.0.1		2-15
	mporary Service	
	mporary Service	2-15
2.9 Te	mporary Service General	<b>2-15</b> 2-16
<b>2.9 Te</b> 2.9.1	mporary Service General Duration of Service	<b>2-15</b> 2-16 2-16
<b>2.9 Te</b> 2.9.1 2.9.2	mporary Service General Duration of Service Deposit	<b>2-15</b> 2-16 2-16 2-16
<b>2.9 Te</b> 2.9.1 2.9.2 2.9.3	mporary Service General Duration of Service Deposit Installation and Operation	<b>2-15</b> 2-16 2-16 2-16 2-16
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> </ul>	mporary Service General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-16
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> <li>2.9.6</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant Unauthorized Use of Hydrants	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-16
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> <li>2.9.6</li> <li>2.9.7</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant Unauthorized Use of Hydrants Rates	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-17
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> <li>2.9.6</li> <li>2.9.7</li> <li>2.9.8</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant Unauthorized Use of Hydrants Rates Credit	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-17 2-17
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> <li>2.9.6</li> <li>2.9.7</li> <li>2.9.8</li> <li>2.9.9</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant Unauthorized Use of Hydrants Rates Credit	<b>2-15</b> 2-16 2-16 2-16 2-16 2-16 2-16 2-16 2-16
<ul> <li>2.9 Te</li> <li>2.9.1</li> <li>2.9.2</li> <li>2.9.3</li> <li>2.9.4</li> <li>2.9.5</li> <li>2.9.6</li> <li>2.9.7</li> <li>2.9.8</li> <li>2.9.9</li> <li>2.9.10</li> </ul>	General General Duration of Service Deposit Installation and Operation Responsibility for Meters and Installations Water Supply from Fire Hydrant Unauthorized Use of Hydrants Rates Credit Credit O Change to Permanent Status	

2.12.1	1 Location of Meter Boxes	2-17
2.12.2	2 Water Meters Required	2-18
2.13	Public Main Extensions	
2.13.2	1 Application	
2.13.2	2 Review Procedure	2-18
2.13.3	3 Requirements	
2.13.4	4 Oversize Main Policy	
2.13.5	5 Out of District Extensions	
2.13.6	6 Inspection Requirements	2-20
2.14	Wells	
2.14.2	1 Protection of Groundwater	
2.14.2	2 Standards	
2.14.3	3 Design Criteria	2-20
2.15	Engineering Policies	
2.15.2	1 General	
2.15.2	2 Design	2-22
2.15.3	3 Water System Design Criteria	
2.16	Conversion of ISDS to Sewer Service	2-29
2.16.1	1 General	
2.16.2	2 Notice	
2.16.3	3 Recorded Notice	
2.16.4	4 Conversion Requirements	2-30
2.16.	5 Compliance; District Action	
2.16.6	6 Penalties	
2.17	Water Service Cross-Connection Control	
2.17.2	1 Purpose	
2.17.2	2 Definitions	
2.17.3	3 Cross-Connection Protection Requirements	2-34
2.17.4	4 Backflow Protection Assemblies	2-36
2.17.5	5 Administrative Procedures	

2.	17.6	Water Service Termination	40
2.18	2017 Wa	ater Master Plan	41
2 19	Special A	Assessments	<b>1</b> 1
2.19	2.19.1	Special Assessment Memo	
	2.19.1	Notice of Public Hearing	
	2.19.3	Business Impact Statement	
3.0	STREETS	3	3-1
3.1	General		3-1
3.2	Design F	Requirements	3-2
3.3	Sidev	valks, Curb and Gutters, Driveway Approaches, Curb Cuts, Alleys and Bikeways	3-6
3.4	Speed N	Aitigation Measures3-	10
3.5	Traffic C	alming Measures	12
3.6	Snow Re	emoval3-	14
3.7	Weed S	praying Policy	15
4.0	STORM	DRAINAGE4	l-1
4.1	General	4	l-1
4.2	Drainag	e Report 4	1-2
4.3	Design F	Requirements (Public and Private) 4	l-7
4.4	Lot Drai	nage Swales (Private)4-	12
4.5	Water S	upply Ditches	12
5.0	IMPROV	/EMENT PLANS (PUBLIC AND PRIVATE)5	5-1
5.1	General	5	5-1
5.2	Require	ments 5	j-1
6.0	EASEME	NTS 5	j-1
6.1	Require	ments6	5-1
7.0	INSPECT	ION AND TESTING	/-1

7.1	General	I	7-1
7.2	Comme	encement of Work	7-1
7.3	Inspecti	ion Requirements	7-1
7.4	Testing	Requirements	7-3
8.0	STREET	LIGHTING (PUBLIC AND PRIVATE)	8-1
8.1	General	l	8-1
8.2	Standar	rds	8-1
9.0	ANNEX	ATION TO THE DISTRICT	9-1
9.1	General	Ι	9-1
9.2	Applicat	tion for Annexation; Expiration	9-1
9.3	Abando	onment / Sale of Open Space	9-1
9.4	Procedu	ures Therefore	9-2
9.5	Action o	of the Board	
9.6	Open Sp	pace Leasing Policy	9-3
10.0	GENI	ERAL PROVISIONS	10-1
10.1	Seve	erability	10-1
10.2	Word	ds and Phrases	10-1
10.3	Busir	ness Impact Statements	10-1
11.0	PAR	KS AND RECREATION	10-1
11.1	Gene	eral	11-1
11.2	Park Use	e and Reservation Policy	
11	.2.11	Smoking Prohibited	11-6
11	.2.12	Security/Law Enforcement Protection	
11	.2.13	Sanitation Facilities	11-6
11	.2.14	Cleaning and Security Deposit	11-7
11	2.17	Classification of Uses and Charges	11-8

11.2.18	Additional Charges
11.2.19	
11.2.20	Miscellaneous Park Use Rules
	space Rules
	AA-1
	BB-1
APPENDIX	C C-1
APPENDIX	DD-1
APPENDIX	EE-1
APPENDIX	FF-1
	GG-1
	НН-1
APPENDIX	ll-1

# 1.0 **DEFINITIONS**

When used in this Policies and Procedures Manual, the following terms shall have the meanings defined below:

- Acreage/Acre: Acreage or acre are synonymous. Acre may mean "gross acre" or net acre" unless otherwise stated within this Manual. The use of the term "acre" means "net acre" wherever used, unless otherwise stated within these procedures. "Gross acre" consists of 43,560 square feet of land, and includes any public streets and alleys or other rights-of-way or easements. "Net Acre" consists of 43,560 square feet of land, exclusive of any public streets and alleys or other rights-of-way, but inclusive of public utility, drainage, or irrigation maintenance easements.
- Alley: An access way which is used primarily for vehicular service access to the back side of properties otherwise abutting on a street.
- Annexation: Annexation is synonymous with the term "inclusion". Annexation is defined to be that process by which the boundaries of the Gardnerville Ranchos General Improvement District are expanded to include certain properties currently within the District's Service Area as defined herein below. Upon the filing of an application followed thereafter by public hearing and an order by the Board accepting the property for inclusion within the boundaries of the District by the annexation process, the District may provide those services which it is enabled to provide by Ordinance Number 147 creating the District, to the extent that those services are now provided. Ordinance Number 147 was duly passed by the Board of County Commissioners of Douglas County on the 9<sup>th</sup> Day of April, 1965.
- Annexation Map: Annexation Map shall mean a Record of Survey plat map which delineates and depicts the boundaries of the property approved for annexation. The annexation map shall be provided to the District by an applicant for annexation after approval of the Application for Annexation, but prior to the recordation of the order of annexation. The annexation map shall state the type of proposed development, the planned density, minimum lot sizes and recreational open spaces and parks proposed for the property to be annexed.
- Annexation Application Fees: Annexation Application Fees means the fees paid to the District when submitting an Application for Annexation for consideration by the Board of Trustees. Annexation Application Fees shall also mean payment of any additional legal, engineering, administrative and publication fees incurred by the District in the processing and review of the Application for Annexation by the District prior to the order of annexation being issued and recorded.

Applicant:	The person, firm, association, corporation or governmental agency applying for water and/or sewer service.
Application:	A written request for water and/or sewer service as distinguished from inquiry as to the availability or charges for such service.
Average Month:	Thirty (30) days.
Average Quarter:	Ninety (90) days.
Bad Check Fee:	That fee charged to a customer for a check which the customer provides to the District when there are insufficient funds on first deposit to honor the check for payment of services to the District; or when a check is not honored for any reason on first deposit by the depository bank.
Billing Period:	An average month/quarter, except for special services.
Board:	Board means the Board of Trustees of the Gardnerville Ranchos General Improvement District.
Commercial Service:	See Service Classification.
Commercial Unit:	Any separately identifiable structure or portion thereof utilized or to be utilized by a person engaged in selling, warehousing or distributing a commodity, or in some business activity, or in a profession or some form of economic or social activity or any other utilization not falling under single family dwelling or industrial unit.
Conditions of Annexation:	Conditions of Annexation shall mean those standard conditions of annexation delineated in Section E.4 of the District Ordinances, and shall mean such other special conditions as may be imposed by the Board on a particular property(ies) due to the unique characteristics of the property(ies) as set forth in the order of annexation.
Connection Charge:	A charge made by the District for providing a service to a future customer.
Construction Standards:	"The Standard Details for Public Works Construction" and "Policies and Procedures Manual" as adopted by the Board of Trustees.
<u>Contiguous:</u>	A property shall be defined to be contiguous by the District if the real property is located within the service area of the District and the real property is capable of being served with the facilities of the District.
Critical Drainage Area:	The floodplain area where the existing drainage system is inadequate, or where some other unusual drainage pattern or criteria exists.
<u>Cubic Foot</u> :	The volume of water which occupies one cubic foot. The cubic foot is equal to 7.481 gallons.

<u>Customer</u> :	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 the service.
Date of Presentation:	The date upon which a bill or notice is mailed or postmarked or delivered to the Customer by the District.
Developer or Subdivider:	"Developer" or "subdivider" means a person, firm or individual or owner engaged in the act of causing a land development.
Development:	Any man-made changes being made to real property.
<u>District</u> :	District means the Gardnerville Ranchos General Improvement District.
District Boundary(ies):	The District Boundary(ies) means the areas that have already been annexed into the District.
District Engineer:	The District Engineer or any of his duly authorized representatives.
District Foreman:	A District appointed person responsible for overseeing the operation of the water system.
District Standards:	The current edition in effect at time of project approval of "Construction Standards" and Standard Specifications", as defined herein and as adopted by the Board of Trustees.
<u>Drainage Plan</u> :	A plan prepared and sealed by a Nevada Registered Professional Civil Engineer, for the collection, transporting, treatment and discharge of stormwater within and from a subdivision/development.
<u>Drainage Report</u> :	A technical engineering report prepared and sealed by a Nevada Registered Professional Civil Engineer, whose purpose is to identify and define drainage characteristics associated with a proposed development and to define possible problems and conceptual solutions. In its final form, the drainage report shall transform the defined conceptual solutions to a final drainage plan.
EDU:	Equivalent Dwelling Unit as used by the Minden-Gardnerville Sanitation District.
<u>Engineer</u> :	Any person who is retained as a consultant by the owner/developer and is legally authorized to practice civil engineering in the State of Nevada in accordance with NRS Chapter 625, and includes Project Engineer as used in this title.

<u>Family:</u>	The District shall utilize the definition of commitment in a private capacity as described in NRS 281A.065 that includes relationship by blood, marriage, adoption, or domestic partnership, but shall also include relationship by civil union and foster parenting. Additionally, one or more persons occupying a dwelling unit and living as a single, non-profit housekeeping unit; provided that a group of four or more persons who are related within the second degree of consanguinity or affinity shall be deemed to constitute a family.
	Notwithstanding the definition in the preceding paragraph, a family shall be deemed to include three or more persons not within the second degree of consanguinity, or affinity occupying a dwelling unit and living as a single, non-profit housekeeping unit, if one or more said occupants are handicapped persons as defined in the Title VII of the Civil Rights Act of 1968 as amended by the Fair Housing Amendments Act of 1988. Such unrelated individuals shall have the right to occupy the dwelling unit in the same manner and to the same extent as any family unit as defined in the first paragraph of this definition.
<u>Final Plat</u> :	A map prepared in accordance with the provisions of NRS Chapter 278 and Douglas County code.
<u>Fire Chief</u> :	That official charged with the title of Fire Chief of the Fire Protection District or his/her designee.
<u>Gallon</u> :	The volume of water which occupies 231 cubic inches.
<u>Gardnerville Ranchos</u> <u>Sewer System</u> :	See <u>Sewer System</u> .
<u>Gardnerville Ranchos</u> <u>Water System</u> :	See <u>Water System</u> .
House Piping:	All sewer or water piping and fittings installed within the house or building up to and including the last fitting inside or outside the wall.
<u>Improvement Plans:</u>	Improvement plans means a set of plans, submitted to the District, depicting the intended on- and off-site improvements for the property sought to be annexed. The improvement plans shall include all on- and off-site improvements including streets, improvements to existing intersections, sidewalks, drainage, curbs and gutters, sewer improvements, water improvements, drainage improvements, street lighting, passive and/or active recreational open spaces and parks, building elevations and intersection signage, and any other improvements required by the District or by Douglas County.

# Improvement Plans

of Record:		lans accepted by the District as the official plans of the subdivision velopment which are placed on file in the office of the District.
Land Use Classifications:	reside	use shall mean agricultural, commercial, industrial, high-density ential, low-density residential or multi-family land uses as defined in ubsection:
	i.	"Agricultural": agricultural or agricultural property shall mean any property sought to be annexed into the District which is to be used in any agricultural use under permit issued by the Douglas County Community Development Department.
	ii.	"Commercial": Commercial or commercial property shall mean any real property sought to be annexed into the District which is to be used in any commercial use under permit issued by the Douglas County Community Development Department.
	iii.	"Residential": Residential property shall be considered as high density residential property or low density residential property according to the following:
		"High Density Residential": High density residential means any property which has been issued a permit or is planned for development, of lot(s) of any area less than 12,000 square feet per dwelling unit.
		"Low Density Residential": Low density residential means any property which has been issued a permit or is planned for development, of lot(s) with a minimum area of 12,000 square feet or larger per dwelling unit.
		"Multi-Family Residential": Multi-Family residential means any property which has been issued a permit or is planned for development, for a building(s) which is (are) occupied or arranged, designed or intended to be occupied by two or more families, and contains more than one dwelling unit, but not including hotels, motels, or boarding houses.
Large Project:	Distrie	e project means any real property sought to be annexed into the ct when the area encompassed by such property is five gross (5) or more in size.
Late Payment or Non-Payment Fee:		fee charged to a customer for any District bill that is not paid in full 30 days of the date of the bill.
<u>Law</u> :		e or rules established and enforced by Federal, State, County or sipal authorities.

<u>Lot</u> :	Means and includes any distinct parcel, or any portion of real property divided with the intent of transfer of ownership or for building development.
Major Drainage Facility:	A channel that has a drainage basin of 100 acres or greater.
Main Extension:	The extension or replacement of water and/or sewer distribution mains and necessary facilities beyond existing service facilities in accordance with the provisions of the section applicable to main extensions.
<u>Mechanical</u> <u>Stabilization</u> :	The application or use of structural measures such as rock rip-rap, gabions, turfstone or an approved equal, to provide sufficient soil cover to prevent soil movement by action of wind or water. Stabilization may include incorporation of vegetative measures if approved, so that in combination the structural and vegetative measures will provide the same level of protection that structural measures alone would provide.
<u>Metered Service</u> :	Service for which charges are computed on the basis of measured quantities of water.
MGSD:	Minden-Gardnerville Sanitation District.
Natural Watercourse:	A natural creek, stream or river.
<u>Order:</u>	Order means the order of annexation or order for out of District services issued by the District after public hearing is held on the petition; approval of the petition is obtained from the Board, and after all of the conditions of the annexation are met by the applicant, including payment of all applicable Application fees to the District.
Out of District Services:	Out of District services shall be all those services customarily provided to properties within the boundaries of the District, which are capable of being provided to properties, which are not annexed into the District boundaries, but are within the District's service area. An application for out of District services shall comply in all respects to a petition for annexation including written assent to future annexation of the property into the District, and a written waiver of protest to assessments for future extension of District services.
<u>Owner</u> :	The person, partnership, firm, corporation, or association having sufficient proprietary interest in the land sought to be subdivided or developed to commence and maintain proceedings to subdivide or develop the same under these Policies and Procedures.
Parcel Map:	A map filed pursuant to NRS 278.461 to 278.469 inclusive, and Douglas County code, which creates 4 or fewer lots, parcels, sites, units, plots or interest.

Pedestrian Walk Way:	A pedestrian walkway constructed on a public easement or dedicated right-of-way.
Permanent Service:	Service which, in the opinion of the District is of a permanent and established character. The permanent use of water and/or sewer services may be continuous, intermittent or seasonal in nature.
<u>Permit:</u>	Permit means any permit, including a special use permit, issued by the Douglas County Community Development Department for an intended use of property.
<u>Person</u> :	Any individual; any partnership, corporation, governmental agency, or other organization operating as a single business entity.
Petition:	Petition means a petition or application for the annexation or inclusion of a parcel of real property within the boundaries of the District. Petition may also mean a petition for out of District service(s) to a property within the District service area, but not annexed with the District boundaries.
	A petition shall set forth an accurate legal description of the property owned by the petitioners, state that assent to the inclusion of such property into the District is given by all of the fee owners of such property who shall sign the petition, and the petition shall be acknowledged I the same manner required for the conveyance of land.
	Petitioner(s) for any Application for Annexation, including those requestion Out-of-District services, the fee owner(s) shall state in writing their waiver of protest to future assessments for future extension of District Services.
	When a petition is submitted to the District, it shall be examined and reviewed by the District Manager, the District Engineer and District Counsel prior to consideration by the Board of Trustees.
	Petition is synonymous with Application.
<u>Premises</u> :	A continuous tract of land, building or group of adjacent buildings under a single control with respect to use of water and/or sewer and responsibility for payment therefore. Subdivision of such use or responsibility shall constitute a division into separate premises as herein defined, except that where more than one dwelling is being served through the same water or sewer service in which case each of said dwellings shall constitute a separate premises and shall be subject to the same separate charges as if separate single family dwellings.
Private Fire Protection Service:	See Service Classification.

<u>Public Fire Protection</u> <u>Service</u> :	See <u>Service Cl</u>	assification.
<u>Service Area:</u>	Community Pla that have not hereby establis generally borde the United Sta East Fork of C east/west exte	shall mean the service area ( or sometimes a.k.a. an Area) of the District. These areas contain large parcels been annexed into the District's boundaries. The Board shes the Service Area of the District as being that area ered on the west by Highway 88, bordered on the south by thes Forest Service property, bordered on the east by the Carson River, and bordered on the north by the proposed nsion of the Waterloo Lane alignment. The northeasterly property is generally defined by the center line of the East son River.
Services Authorized:	authorized to p of streets, co maintenance	prized shall mean all those services which the District is rovide to its constituents, including paving, the maintenance onstruction of curbs, gutters and sidewalks, and the of curbs and gutters, storm drainage, sanitary sewer water improvements and street lighting.
Service Classification:	(1)	<b>Commercial Service:</b> Water and/or sewer service to real property of Customers engaged in selling, warehousing, or distributing a commodity, or in some business activity, or in a profession, or in some form or economic or social activity (offices, stores, clubs, hotels, etc.) or in any other activity that does not come directly under another classification or service.
	(2)	Irrigation Service: Water service to Customers for agricultural, floracultural or horticultural use.
	(3)	<b>Private Fire Protection Service:</b> Water service to real property of Customers supplied for fire protection of specific facilities.
	(4)	<b>Residential Service</b> : Water and/or sewer service to real property of Customers supplied for residential purposes in a single-family dwelling or building, or in an individual flat or apartment in a multiple family dwelling.
		Commercial and residential water and/or sewer service to the same premises where the commercial use by gallonage for water as estimated is less than fifty (50%) of total shall be classed as residential use.
Service Connection:	The point of connection of the Customer's piping with the District's water and/or sewer facilities.	

<u>Service Pipe</u> :	The connection between the District's water and/or sewer mains and the service connection, including all of the pipe, fittings and valves necessary to make the connection.	
<u>Services Provided:</u>	Services provided shall mean those services which the District currently provides to its constituents, including the maintenance of streets, curbs, gutters, storm drainage, sanitary sewer and water improvements and street lighting.	
<u>Sewer System</u> :	The system of conduits,pumps, tanks and structures used for the purpose of conveying sewage from its sources to the downstream limits of the District's sewer mains.	
<u>Sidewalk</u> :	A public pedestrian walkway located adjacent to or immediately near a street.	
Single Family Dwelling:	Any single residence, mobile home, apartment, habitation or other structure occupied or to be occupied by a single person or family requiring water and/or sewer service.	
Standard Specifications:	The "Standard Specifications for Public Works Construction" hereinafter referred to as S.S.P.W.C., as adopted by the Board of Trustees.	
<u>Street - Private</u> :	A street for vehicular traffic to access two or more single family residential units which is to be owned and maintained by parties other than the District.	
<u>Street - Public</u> :	A way for vehicular traffic whether designated as a street, freeway, highway, parkway, throughway, road, avenue, drive, lane, boulevard, place, or however otherwise designated, but not including alleys or private streets.	
<u>Subdivider</u> :	A person who owns and causes land to be divided by means of a subdivision or parcel map.	
<u>Subdivision</u> :	Pursuant to NRS 278.320, any land, vacant or improved, which is divided or proposed to be divided into 5 or more lots, parcels, sites, units or plots for the purpose of any transfer, development or any proposed transfer or development.	
<u>Surveyor</u> :	A person who is retained by the owner/developer and is currently licensed to practice land surveying in the State of Nevada in accordance with NRS Chapter 625.	
<u>Water System</u> :	The system of conduits, pumps, tanks and structures used for the purpose of conveying from its sources, treating in any manner and conveying to final points of use, all water services requested of the District and on a	

schedule approved by the Board. Specifically included as integral parts of
the system are conduits of any nature forming a part of the general
network of conduits or connected directly or indirectly to said network; all
pumps, treatment facilities, tanks and structures of any kind used in
connection with the collection, treatment and disposition of water; and all
appurtenances to any of the above, either physically or functionally
connected therewith.

- <u>Water System Capacity</u> Water System Capacity directly relates to the District's ability to provide water of sufficient quantity and quality that meets all Federal and State safe drinking water standards.
- <u>Water System Aquifer Capacity</u> Water system Aquifer Capacity means the volume of water that is stored beneath the ground in a water bearing formation which is dependent upon recharge and extraction and meets all safe drinking water quality standards. The aquifer must allow for adequate recharge to support current and future water demand. Capacity is sustained if predetermined static water levels and chemical constituents remain largely unchanged over the long term and the aquifer within Hydrobasin 105 is operating within its water right limitations.
- Water System Infrastructure CapacityWater System Infrastructure Capacity means the ability of<br/>a system 1) to deliver an adequate supply of water to satisfy maximum<br/>daily demand and fire flows; 2) is in good condition; and 3) has not<br/>exceeded its useful life. The supply of water must meet all drinking water<br/>standards from source to distribution
- Water Supply Ditch:
   A ditch conveying water for domestic or agricultural purposes that is owned and/or controlled by a ditch or utility company
- Will Serve LetterA Will Serve Letter is an agreement between the District and an owner(s)<br/>or developer(s) to provide water and/or sewer services to a specific<br/>property. A Will Serve Letter is issued by the District outlining the<br/>conditions of service to a particular parcel. The initial Will Serve Letter<br/>constitutes the District's conditional commitment to serve new<br/>developments and to ensure that sufficient Water System Capacity is<br/>available to provide such service.

A Will Serve Letter will be considered by the District upon application by the property owner(s) and will expire one (1) year after the date of issuance. If substantial progress is being made by the owner(s) regarding the development, the Will Serve may be extended for one additional year with Board approval

<u>Yard Line</u>: All water and/or sewer piping between the house piping and the service connection.

# 2.0 WATER AND SEWER SERVICE

# 2.1 Service

- 2.1.1 Application for New Service
  - 2.1.1.1 Applications hereunder may be made only by any owner of property to be served, or such owner's duly authorized agent.
  - 2.1.1.2 Content

Each applicant for water and/or sewer service shall be required to sign, on a form provided by the District, an application, which shall set forth:

- a. Date
- b. Location of premises to the served, giving street address and description of property to be served.
- c. Applicant's name and mailing address of the legal owner of the premises to which the monthly/quarterly bills are to be mailed.
- d. Purpose for which the property will be used (residential, commercial, apartments, etc.), including type of effluent and fixture unit count for commercial uses.
- e. The name of the contracting or plumbing agency that will be hooking the premises to the District's water and/or sewer systems.
- f. The application, or the deposit of any sum of money by the Applicant, shall not require the District to render service until the expiration of such time as may be reasonably required by the District to determine if Applicant has complied with the provision of these Rules and Regulations and as may reasonably required by the District to install the required service facilities.
- 2.1.1.3 Responsibility

The applicant, being the legal owner, is responsible for the payment of all water and/or sewer charges at the premises applied for and within the meaning of this chapter is referred to as the "customer". Only the original applicant may request termination of service in writing or a change in the person or address to which the utility bill is to be sent.

2.1.2 Change in Customer's Equipment or Operations

A customer making any change to the size, character or extent of the equipment or operations for which the service is utilized shall immediately file with the District a new application for additional service.

- 2.1.3 Installation of Services
  - 2.1.3.1 Water Service
    - 2.1.3.1.1 The property developer shall be responsible for providing and installing the service pipe from the main to the meter pit. The developer shall be responsible for installing the following items:
      - a. The meter pit.
      - b. All necessary fittings, valves and connections necessary to connect the meter.
      - c. The meter jumper.
      - d. Meter (Supplied by the District at developer's expense.)
    - 2.1.3.1.2 The property owner shall provide and install all pipes and fixtures extending or lying on the property owner's side of the meter pit.
    - 2.1.3.1.3 Every building or premise served by a water service line shall have a master house or building valve installed at the expense of the owner, in addition to the District valve, so that the occupant or owner can shut off the water supply to the building or premise without using the District valve or requiring the District to close any District or other valves to permit repairs or to shut off the water to the property for any purpose.
    - 2.1.3.1.4 The District shall provide the following items:
      - a. The meter (at the developer's expense).
    - 2.1.3.1.5 The District will require meters, at the property developer's expense, to be installed for all new construction and/or for remodels where the additional fixture units are added.

# 2.1.3.2 Sewer Service

2.1.3.2.1 The property developer shall be responsible for providing and installing the service pipe from the main to the clean-out at the property line. The developer shall be responsible for providing and installing the following items:a. The pipe.

- b. The clean-out, plugs and marker stake.
- 2.1.3.2.2 The property owner shall provide and install all pipes and fixtures extending or lying on the property owner's side of the clean-out at the property line.
- 2.1.3.2.3 Developer and owner shall comply with all requirements of the Minden Gardnerville Sanitation District.
- 2.1.3.3 Excavation or Demolition of an Existing Sewer Service Lateral
  - 2.1.3.3.1 For a proposed excavation or demolition, the District will provide the person responsible for the excavation or demolition with the District's best available information regarding the location of the connection of the existing sewer service lateral to the sewer main. The District will convey the information to the person responsible for the excavation or demolition in such manner as is determined by the District, which may include any one or more of the following methods, without limitation:
    - a. Identification of the location of the connection of the sewer service lateral to the sewer main;
    - b. Providing copies of documents relating to the location of the sewer service; or
    - c. Placement of a triangular green marking along the sewer main or the edge of the public right-of-way, pointing toward the real property serviced by the sewer service lateral to indicate that the location of the sewer service lateral is unknown.
  - 2.1.3.3.2 The District will make its best efforts to comply with paragraph (a), (b), or (c) of subsection 2.1.3.3.1 within 2 working days from receipt of a written request (or within a mutually agreed upon time) that clearly identifies the property owner and the person responsible for the excavation or demolition and clearly describes the location of the property and the reasons for the location request.
  - 2.1.3.3.3 The District may charge a person responsible for excavation or demolition in a public right-of-way for complying with this section in the amount that does not exceed the actual cost incurred by the District.
  - 2.1.3.3.4 If the District has received the information pursuant to NRS 455.131 or has otherwise identified the location of the sewer service lateral in the public right-of-way, then the District will be responsible thereafter to identify the location of the sewer service lateral from that information.
  - 2.1.3.3.5 The District shall maintain all information relating to the locations of connections of the sewer service laterals to the sewer main as developed by the District pursuant to Section 2.1.3.3.
  - 2.1.3.3.6 The District, who is not otherwise required by law for maintenance, operation, ownership or repair of a sewer service lateral that connects

to the sewer main does not assume any further duty with respect to a sewer service lateral, and the District does not assume any responsibility for the maintenance, operation, ownership, or repair of the sewer service lateral that connects to the sewer main.

2.1.3.3.8 A person who connects a sewer service lateral to a sewer main shall provide a permanent maker as designated by the District at the connection of the sewer service lateral to the sewer main and where the sewer service lateral exits the public right-of-way and promptly provide the District with the location of such permanent devices as well as provide the District with Record Drawings that clearly identify where the lateral was installed.

## 2.1.4 Maintenance of Services

- 2.1.4.1 Water Service
  - 2.1.4.1.1 The service connection extending from the water main to the property and including the curb stop and/or meter, meter pit and yoke shall be maintained by the District. All pipes and fixtures extending or lying beyond the curbstop or meter pit shall be installed and maintained by the owner of the property.
  - 2.1.4.1.2 No person, other than authorized District personnel, shall open, close, operate, tamper with, tap or connect into any District valve or any District mains, pipes, laterals, hydrants or other valves or pipes owned or controlled by the District or used by the District in connection with the water works, unless authorized by the District Manager and/or District Foreman.
  - 2.1.4.1.3 The District policy is to allow each residence only one water service connection for all uses, including, without limitation, domestic, and/or landscaping. The District has recognized existing irrigation service lines for which connection fees were not paid as of August 24, 1988, and has determined to allow said irrigation service lines to remain in place. The District has further determined that no additional service lines will be connected to the water system of the District without compliance with Section II of the Gardnerville Ranchos General Improvement District Policies and Procedures Manual.
  - 2.1.4.1.4 The District shall maintain only domestic water service lines which have been connected to the District water system through application and payment of connection fees in accordance with the requirement of Section II of the Policies and Procedures Manual. The District shall maintain only the water service connection extending from the water main to the property boundary, including the curb stop and/or water meter, water meter pit and yolk.

Any other pipe(s) or fixture(s) located, extending or lying beyond the curb stop or water meter pit shall be maintained by the owner of the property. No connection to the District's water main shall be made for any purpose without prior approval of the District, and compliance with the District's Policies and Procedures Manual.

# 2.1.4.2 Sewer Service

- 2.1.4.2.1 The service line extending from the sewer main to the clean-out at the property line shall be maintained by the property owner. The clean-out and all pipes and fixtures extending or lying beyond the property line shall be installed and maintained by the owner of the property.
- 2.1.4.3 "Upon experiencing a problem with sewer or water service at a property within the District, the owner or occupant of the property must first notify the District of the problem. District personnel are available seven (7) days a week, twenty-four (24) hours a day, and are on call to respond to problems with the District's water and sewer facilities and service. The homeowner/occupant shall notify the District by telephoning the District offices during regular business hours, or the Douglas County Sheriff's Office after regular business hours, and request that District personnel respond to the location of the property to inspect and/or repair District owned and/or maintained facilities.

District personnel will respond to the location of the homeowner/occupant's property to evaluate the problem, and to repair and/or maintain any District owned facilities found to be the cause of the problem; all at no cost to the homeowner/occupant.

After evaluation by District personnel, if the problem is found to be with the sewer clean out, or sewer or water pipes or fixtures extending or lying beyond the property line, and not the responsibility of the District, District personnel shall notify the homeowner/occupant who may then authorize such repairs as the homeowner/occupant deems necessary. No reimbursement for such repairs will be made by the District.

The District will not honor a request for reimbursement of charges incurred by the homeowner/occupant for a water or sewer related problem, even if the problem is caused by a District owned and/or maintained facility, unless District personnel have been notified by the homeowner/occupant and provided an opportunity to evaluate and repair the District owned and/or maintained facility prior to the owner/occupant incurring charges for such repair of District facilities.

# 2.1.5 Connection Charges

2.1.5.1 In no case will service connection be made unless the property to be served fronts on a street with an adequately sized main.

- 2.1.5.2 If adequately sized mains are not available, the property owner shall pay for adequately sized mains to be extended to the property in accordance with the provisions of the District policies and procedures.
- 2.1.5.3 Connection charges will be set from time to time by Resolution of the Board. See Section 11, "Water Rates, Fees and Charges", and Section 12, "Sewer Rates, Fees and Charges."
- 2.1.6 Number of Services to Separate Premises

Each residence shall have an individual service and shutoff, whether or not the homes are constructed on the same lot. Existing residences where more than one are served by a single service shall be allowed to continue as long as all bills for service are kept current and all rules are followed. The District may, at its own discretion and at any time the above conditions are violated, decline to furnish water until separate services are provided. In all cases where water has been supplied to several parties or tenants from a connection with the supply controlled by one valve and the District has contracted with one of the several parties, upon his or their failure to abide by the said rules and regulations the water may be shut off.

## 2.1.7 Unauthorized Alterations

No person shall make any alterations or extensions to any water and/or sewer pipe or fixture except in compliance with the provisions of these Rules and Regulations.

#### 2.1.8 Resale of Water

Except by special agreement with the District, no Customer shall resell any of the water received from the District, nor shall such water be delivered to premises other than those specified in such Customer's application for service.

2.1.9 Cross-Connection Protective Devices on Water Service Connections

Where any water pipe on a Customer's premises is cross-connected to another source of water supply, the District may refuse service or discontinue service until there shall be installed at the expense of the Customer a suitable protective device, approved by the District, to protect against back-flow into the District's system, as required by the State Health Department and other State, County or Municipal authorities having jurisdiction.

2.1.10 Right of Access to Premises of Customer

The District or its duly authorized agents shall have at all reasonable times the right to ingress to and egress from the Customer's premises for any purpose properly connected with service to the Customer.

# 2.1.11 Responsibility for Loss or Damage

The District will not be responsible for any loss or damage caused by any negligence or wrongful act of a Customer or his authorized representative in installing, maintaining, operating or using any or all appliances, facilities or equipment for which service is supplied.

The Customer will be held responsible for damage to the District's facilities and other property resulting from the use or operation of appliances and facilities on Customer's premises, including damage caused by steam, hot water, chemicals, etc.

# 2.1.12 Responsibility for Equipment

The Customer shall, at his own risk and expense, furnish, install and keep in good and safe condition all equipment that may be required for receiving, controlling, applying and utilizing water, and the District shall not be responsible for any loss or damage caused by the improper installation of such equipment, or the negligence or wrongful act of the Customer or any of his tenants, agents, employees, contractors, licensees or permittees in installing, maintaining, operating or interfering with such equipment. The District shall not be responsible for damage to property caused by faucets, valves and other equipment that are open when water is turned on at the meter, either originally or when turned on after a temporary shutdown.

# 2.1.13 Pools and Tanks

When an abnormally large quantity of water is desired for filling a swimming pool or for other purposes, arrangements must be made with the District prior to taking such water. Permission to take water in unusual quantities will be given only if it can be safely delivered through the District's facilities and if other consumers are not inconvenienced thereby.

# 2.1.14 Services Used Without Application Being Made

A person taking possession of premises and using water and/or sewer service from an active service connection without having made application to the District for water and/or sewer service, shall be held liable for the water delivered and/or sewage treated from the date of the last recorded metered or flat rate billing, and if there is no meter or the meter is found inoperative the quantity consumed will be estimated. If proper application for water and/or sewer service is not made upon notification to do so by the District, and if accumulated bills for service are not paid immediately, the water service may be discontinued by the District without further notice.

2.1.15 Damages Through Leaking Pipes and Fixtures

When turning on the water supply as requested, the Customer must be present. The District will endeavor to ascertain if water is running on the inside of the building. If such is found to be the case, the water will be shut off at the curb cock on the inlet side of the meter. The District's jurisdiction and responsibility ends at the meter pit and the District will in no case be liable for damages occasioned by water running from open or faulty fixtures, or from broken or damaged pipes inside the property line.

# 2.2 Rendering and Payment of Bills

- 2.2.1 Rendering of Bills
  - 2.2.1.1 Bills for service will be rendered to each Customer on a monthly basis. The bill will include charges for both sewer and water service, if appropriate.
  - 2.2.1.2 Metered Service

Bills for metered water service will show at least the reading of the meter at the end of the period for which bill was rendered and the date of the current meter reading. If, for reasons beyond its control, the District is unable to read the Customer's meter on the scheduled date, the District may bill the Customer for estimated consumption during the billing period, subject to adjustment at the time the meter is next read.

2.2.1.3 Proration of Bills

Charges will be prorated to date service is final.

2.2.2 Payment of Bills and Penalty for Non-payment

Bills for service are due and payable upon the date of presentation and payment may be made at the office of the District or to any representative of the District authorized to make collections. Payment of closing bills shall be made at the time of presentation. Bills not paid within 30 days shall become delinquent. A penalty will be charged for bills over 30 days old in the amount set forth in Appendix B.

2.2.3 Application of Payments

In the event of a partial payment of a bill rendered for sewer and water service, the District shall apply the monies paid first to the sewer portion of the bill and then to the water portion of the bill.

## 2.2.4 Disputed Bills

In case of a dispute between a Customer and the District as to the correct amount of any bill, charge or service rendered by the District for water or sewer service furnished to the real property of the Customer, the Customer shall first deposit with the District the amount claimed by the District to be due. In case of such a dispute, failure on the part of the Customer to make such a deposit, within fifteen (15) days after written notice by the District stating that such deposit must be made or water service may be discontinued, shall warrant the District in discontinuing the water service to the Customer without further notice.

After such deposit, the District shall forthwith make such investigation as shall be required by the particular case, and report the result thereof to the Customer. The District shall notify the Customer in writing or otherwise that he has the privileges of appeal to the Board of Trustees of the District as indicated in this rule. In the event that the complaint cannot be satisfactorily adjusted, the Customer may make application to the Board of Trustees of the District for adjustment of the complaint.

# 2.2.5 Customer Request to Turn Off Water During Non-Business Hours

Any request to turn water service off or on for non-emergency purposes during nonbusiness hours shall result in a charge to the requesting customer equal to one and onehalf (1½) times the salary of the District employee(s) who responds to such request and provides a water service "turn-off" or "turn-on". The requesting customer shall be charged all costs of the Gardnerville Ranchos General Improvement District which are occasioned by a customer's request to turn water service off or on. Included, without limitation, is the amount of overtime pay which the District is obligated to pay its employee(s) for responding to such request.

# 2.2.6 Prepayment Discount

When a customer of the District is presented with the District's invoice for water and sewer services, the customer may pay one year's charges for water and sewer in advance. Should a customer elect to prepay, in advance, the customer's water and sewer fees, the District Manager is authorized to discount the customer's annual sewer charges by 10%. A customer may elect to prepay one year's fees during any of the quarterly billing cycles. The one year discount will commence from the first day of the billing cycle following the end of quarter in which the prepayment is made. The discount is only available to customers with non-water metered accounts.

#### 2.3 Information Available to the Public

# 2.3.1 General Information

The District will maintain, open for public inspection at its commercial office, pertinent information regarding the service rendered, including the following:

a. Characteristics of Water

A description in writing of the kind of water to be furnished, whether filtered or unfiltered and whether treated or untreated.

b. Rates and Rules

A copy of the District Policies and Procedures including rates, general rules of the District, service area maps and forms of contracts and applications applicable to the territory served.

## 2.3.2 Rates

- 2.3.2.1 The Utility will explain to every Applicant for water and/or sewer service each rate schedule which is applicable.
- 2.3.2.2 Should new or revised rates be established according to law, the District will duly notify all Customers affected by public notice.

## 2.4 Discontinuance of Service

- 2.4.1 Water Service
  - 2.4.1.1 Customer's Request for Discontinuance of Water Service
    - 2.4.1.1.1 A Customer may have water service discontinued by giving not less than one (1) business day's advance notice in writing thereof to the District on the District supplied form. Charges for service may be required to be paid until the requested date of discontinuance or such later date as will provide not less than the required one (1) business day's advance notice in writing on the District supplied form.
  - 2.4.1.2 Discontinuance of Water Service by District
    - 2.4.1.2.1 For Nonpayment of Bills

A Customer's water service may be discontinued for nonpayment of a bill for either sewer or water service furnished, or both, if the total bill is not paid by the due date printed on the bill (15 days), provided the District has given the Customer at least 24 hours notice in writing of such intention.

2.4.1.2.2 For Noncompliance with Rules

The District may discontinue water service to any Customer for violation of these rules after it has given the Customer at least 48

hours written notice of such intention. Where safety of water supply is endangered, service may be discontinued or curtailed immediately without notice.

2.4.1.2.3 For Waste of Water

Where negligent or wasteful use of water exists on or from a Customer's premises, the District may discontinue the service if such practices are not remedied within 48 hours after it has given the Customer written notice to such effect. Refer to Ordinance No. 93-1.

2.4.1.2.4 For Unsafe Apparatus or Where Service is Detrimental or Damaging to the District or Its Customers.

If any unsafe or hazardous condition is found to exist on the Customer's premises, or if the use of water thereon by apparatus, appliances, equipment or otherwise is found to be detrimental or damaging to the District or its customers, the water service may be shut off without notice. The District will notify the Customer immediately of the reasons for the discontinuance and the corrective action to be taken by the Customer before water service can be restored.

2.4.1.2.5 For Fraudulent Use of Service

When the District has discovered that a Customer has obtained sewer or water service or both by fraudulent means, or has diverted the water service for unauthorized use, or is using the sewer service for an unauthorized use, the water service to that Customer may be discontinued without notice. The District will not restore water service to such Customer until that Customer has complied with all rules and reasonable requirements of the District and District has been reimbursed for the full amount of the water and/or sewer service rendered and the actual cost to the District incurred by reason of the fraudulent use.

# 2.4.2 Sewer Service

2.4.2.1 Customers Request for Discontinuance of Sewer Service

A customer may not request discontinuance of sewer service

- 2.4.2.2 Discontinuance of Sewer Service by District
  - 2.4.2.2.1 Policy

Due to the nature of the service provided, due to health considerations and due to the difficulty involved in disconnection

of the sewer service, the District does not intend in normal circumstances to disconnect a Customer's real property from the District's sewer service. It is the policy of the District to enforce payment of bills for sewer service and compliance with these Policies and Procedures relating to sewer service by the discontinuance of water service in the method and for the reasons above noted.

2.4.2.2.2 Discontinuance in Exceptional Circumstances

In the event a Customer obtains an alternate source of water service, and is so abusing the sewer service furnished by the District as to threaten continued safe and reliable operation of sewer service by the District to its Customers, or by means of effluent placed in the District's sewer system or by means of fraudulent use of same is threatening the economical operation of such system, then and in that event the District reserves the right to enter onto the property of the Customer concerned, if necessary, and, without liability for trespass, disconnect Customer's real property from the District sewer system. By its application for sewer service, Customer consents to such entry onto real property for such purposes.

The District contracts its sewer capacity in the Minden -Gardnerville Sanitation District's Wastewater Treatment Facility, and pursuant to the terms of said contract, and the requirements of the Environmental Protection Agency, the District is authorized and required to disconnect sewer service to any property within the District, upon such notice and on such terms as required by law and these Policies and Procedures, at such time as inspectors from the Minden-Gardnerville Sanitation District notify the District in writing to do so, and/or is authorized to issue such citations for improper discharge as required by such Minden-Gardnerville Sanitation District personnel.

# 2.4.2.2.3 Notice

The District will give the Customer five (5) days written notice of its intention to disconnect sewer service and the reasons therefor, unless circumstances are such that Customer's actions threaten the continued safe and reliable operation of the District's sewer service, in which case the District may disconnect such sewer service without notice but with reasons for such discontinuance supplied immediately to the customer.

# 2.4.2.2.4 Charges

Customer shall be responsible for all costs incurred by the District for a discontinuance of sewer service in these circumstances, such cost being equal to the actual costs of labor and material utilized by the District in the course of such discontinuance, which costs shall be repaid to the District prior to reconnection to the District's sewer system.

#### 2.5 Restoration of Service

#### 2.5.1 Reconnection charge

Where water service has been terminated for violation of these rules or for non-payment of bills, the District shall charge a fee for reconnection of service as set our in Section 11, "Water Rates, Fees and Charges."

## 2.5.2 To be made during regular working hours

The District will endeavor to make water reconnections during regular working hours on the day of the request, if conditions permit, otherwise reconnections will be made on the regular working day following the day the request is made.

## 2.5.3 Restoration of sewer service

Restoration of sewer service discontinued per Paragraph 2.4.2.2.2 above shall be accomplished by the Customer first making application therefor, on the District's form, to the District at its business office during regular working hours. Said application shall be accompanied by payments in a form satisfactory to the District, of the District's cost of discontinuance of serve as set forth in Paragraph 2.4.2.2.4 above. Upon approval of said application and payment, the Customer shall provide for reconnection of said sewer service by persons or firms other than the District, unless the District consents to do so for the charges set forth in Section 12, "Sewer Rates, Fees and Charges."

#### 2.6 Refusal to Serve

# 2.6.1 Conditions for refusal

The District may refuse to serve an applicant for service or existing customer under the following conditions:

- a. If the applicant or customer fails to comply with any of the provisions of this Policies and Procedures Manual.
- b. If the intended use of the service is of such a nature that it will be detrimental or injurious to existing customers.
- c. If, in the judgment of the District the applicant's installation for utilizing of the service is unsafe or hazardous, or subject to freezing, or of such nature that satisfactory service cannot be rendered.

d. Where service has been discontinued for fraudulent use, the District will not serve an applicant until it has determined that all conditions of fraudulent use or practice have been corrected.

# 2.6.2 Notification to Customers

When an applicant is refused service under the provisions of these rules and regulations, the District will notify the applicant promptly of the reason for the refusal to serve and of the right of the applicant to appeal the decision of the District to the Board of Trustees of the District.

# 2.7. Continuity of Service

- 2.7.1 Emergency Interruptions
  - 2.7.1.1 The District will make all reasonable efforts to prevent interruption to service and when such interruptions occur will endeavor to re-establish service with the shortest possible delay consistent with the safety to its Customers and the general public. When it becomes necessary to interrupt service through a water main or line for emergency repair the District will endeavor to notify all persons affected as soon as it is feasible, taking into consideration the severity of the emergency.
  - 2.7.1.2 Where an emergency interruption of water service affects the service to any public fire protection device, the District will promptly endeavor to notify the Fire Chief or other public official responsible for fire protection of such interruption and of subsequent restoration of normal service.
  - 2.7.1.3 The District will not be liable for interruption or shortage, or insufficiency of water supply and/or sewer service, or any loss or damage of any kind or character occasioned thereby, if same is caused by Act of God, fire, strike, riot, war, accident, breakdown, action by governmental body or any other cause beyond the control of the District.
  - 2.7.1.4 Under disaster conditions the District will cooperate to the fullest extent with the governmental agency having authority in the area.

# 2.7.2 Scheduled Interruptions

2.7.2.1 Whenever the District finds it necessary to schedule an interruption to its service, it will, where feasible, notify all Customers to be affected by the interruption, stating the approximate time and anticipated duration of the interruption. Scheduled interruptions will be made at such hours as will provide least inconvenience to the Customers consistent with reasonable District operations. Whenever the District finds it necessary to temporarily shut down a water main or waterline for repair, the District will not notify

homeowners unless it is anticipated that the repair will interrupt service for longer than thirty (30) minutes.

- 2.7.2.2 Where public fire protection is provided by the water mains affected by the interruptions, the District will promptly endeavor to notify the Fire Chief or other officials responsible for fire protection stating the approximate time and anticipated duration. In addition, the Fire Chief or other officials responsible for fire protection will be notified promptly upon restoration of service.
- 2.7.3 Apportionment of Water Supply During Times of Shortage
  - 2.7.3.1 During time of threatened or actual water shortage, the District will apportion available water supply among its Customers. It will apportion the supply in the manner that appears most equitable under circumstances then prevailing, and with due regard to public health and safety.
  - 2.7.3.2 Watering restrictions are detailed in Ordinance 93-1.
  - 2.7.3.3 Whenever it becomes necessary to interrupt service through a water main or water line for maintenance, non-emergency repair or construction at the request of a contractor performing services within the District, the contractor performing such work will provide twenty-four (24) hours written notice to each customer or home affected. The notice shall include the approximate time the water service will be interrupted, the anticipated duration of the interruption, and the approximate time that water service will be restored. The notice shall provide a brief description of the work to be performed (e.g., water main replacement/repair, etc.) The notice shall be personally delivered to each homeowner. If personal service of the notice cannot be provided to the homeowner, the notice shall be left at the front door and placed in a manner where it cannot be affected by natural elements, e.g., the notice shall be affixed in such a way as to prevent its destruction by rain, wind or other elements.

# 2.8 Service to Users Outside District Limits

2.8.1 The board shall have authority to make and enter into such contracts as may be necessary, convenient or proper with respect to water and/or sewer service to improved property outside the territorial limits of the District and with respect to the payment of proper charges for such service, which shall in no case be less than the rates established for users within the District. No such contract shall impair the ability of the District to properly serve its customers within the District.

# 2.9 Temporary Service

## 2.9.1 General

The District will, if no undue hardship to its existing consumers will result therefrom, furnish temporary service under the following conditions.

#### 2.9.2 Duration of Service

Temporary service connection shall be disconnected and terminated within 90 days after installation unless an extension of time is granted in writing by the Board.

#### 2.9.3 Deposit

The applicant shall deposit, in advance, the amount set forth in Appendix B for a meter. If water service is supplied through a fire hydrant, the applicant will be charged in accordance with the rate schedule set forth in Appendix B.

#### 2.9.4 Installation and Operation

All facilities for temporary service to Customer connections shall be made by the District and shall be operated in accordance with its instructions.

#### 2.9.5 Responsibility for Meters and Installations

The Customer shall use all possible care to prevent damage to the meter or to any other loaned facilities of the District which are involved in furnishing temporary service from the time they are installed until they are removed, or until 48 hours notice in writing has been given to the District that the Contractor or other person no longer requires the meter or meters and the installation. If the meter or other facilities are damaged, the cost of making repairs shall be paid by the Customer.

#### 2.9.6 Water Supply from Fire Hydrant

An applicant for temporary use of water from a fire hydrant must secure a permit therefor from the District and pay the regular fee charged for the temporary service connection and; provide himself with a hydrant wrench necessary to operate such hydrant, or deposit with the District the amount set forth in Appendix B for the loan of such equipment, and pay for the water used in accordance with the meter readings, at the rates prescribed by the Board, set forth in Appendix B.

#### 2.9.7 Unauthorized Use of Hydrants

Tampering with any fire hydrant for the unauthorized use of water therefrom, or for any other purpose, is a misdemeanor, punishable by law.

## 2.9.8 Rates

2.9.8.1 Water Service

The District shall charge a fee for temporary water service at the rates set forth in Appendix B "Water Rates, Fees, and Charges".

2.9.9 Credit

The applicant shall pay the estimated cost of service in advance or shall be otherwise required to establish credit.

## 2.9.10 Change to Permanent Status

In the event a temporary service becomes permanent, Section 2.1 shall apply to the Customer, along with all other Policies and Procedures and a valid rules and regulations of the District.

## 2.10 Water Rates, Fees and Charges

Water rates for all classes and types of use may be changed and set by resolution of the Board. Changes in water rates shall be adopted by the Board after due public notice is given by publication in a newspaper of general circulation in Douglas County. Water rates for all classes and types will be established at a meeting of the Board. Existing water rates for all classes and types are found in Appendix B.

# 2.11 Sewer Rates, Fees and Charges

Sewer rates for all classes and types of use may be changed and set by resolution of the Board. Changes in sewer rates shall be adopted by the Board after due public notice is given by publication in a newspaper of general circulation in Douglas County. Sewer rates for all classes and types will be established at a meeting of the Board. Existing sewer rates for all classes and types are found in Appendix C.

#### 2.12 Water Meters

- 2.12.1 Location of Meter Boxes
  - 2.12.1.1 Meter boxes shall be installed at the property line on the owner's property within the  $7\frac{1}{2}$  ft. public utility easement.
  - 2.12.1.2 No meter boxes shall be installed in driveways.

2.12.1.3 Meter boxes moved for the convenience of the customer will be relocated at the Customer's expense.

## 2.12.2 Water Meters Required

2.12.2.1 Water meters shall be installed in all new construction within the water meter boxes required by the immediately preceding subsection. The District's charges for water service to the property where the water meter has been installed shall be based upon water use as determined by the water meter installed. All metered water service users shall be charged for water used in accordance with the rates set forth in Appendix B "Water Rates, Fees and Charges" as amended from time to time.

# 2.13 Public Main Extensions

- 2.13.1 Application
  - 2.13.1.1 Any owner of one or more lots or parcels of land desiring the extension of one or more water and/or sewer mains to serve such property within the service area of the District shall make a written application therefore to the District. Said application shall meet the requirements of Ordinance 92-1 and shall include the legal description of the property to be served and any additional information which may be required by the District, and be accompanied by a map showing the location of the proposed connections.
  - 2.13.1.2 A Developer desiring to provide water and/or sewer service to a new subdivision within the service area of the District shall make written application therefore to the Board. Said application shall meet the requirements of Ordinance 92-1 and shall include a legal description and the name of the subdivision. It shall be accompanied by a copy of the tentative and/or final map and of the plans, profiles and specifications for all construction improvements within the subdivision, including any water and/or sewer main extensions.

# 2.13.2 Review Procedure

- 2.13.2.1 Upon receipt of the application the Engineer shall make an investigation of the proposed extension or subdivision and shall report his findings to the District including a recommendation as to the facilities required. The Board shall thereupon consider said application and report, and after such consideration, either reject or approve it.
- 2.13.2.2 All extensions thus approved, in accordance with these Policies and Procedures, shall remain the property of the District after testing and final acceptance by the Board.

# 2.13.3 Requirements

- 2.13.3.1 The size, type and quality of materials and location of the line shall be specified by the District.
- 2.13.3.2 The Applicant or Sub-divider shall provide for the construction of the water and/or sewer facilities in accordance with the plans and specifications approved by the Board and subject to inspection by the Engineer. The agreement shall also provide for the payment by the Sub-divider of all costs and expenses of the Board relating to the installation of the subdivision's water and/or sewer system, including but not limited to, the District costs of engineering, inspection, easements, rights-of-way, legal and administrative expenses, and may provide for the deposit by the Applicant of cash or Surety Bonds or other improvements security satisfactory to the Board to guarantee the faithful performance of the agreement for the water and/or sewer installation. Said cash deposit, Surety Bond or other improvements security shall be in the sum or sums of estimated cost of the engineering, inspection, legal and administrative expenses of the Board and the estimated cost of the installation of the water and/or sewer system and said bond or improvement security shall in addition to guaranteeing the faithful performance of the work guarantee the maintenance of the water and/or sewer system to be installed pursuant to the agreement for a period of one (1) year following the completion and acceptance of the work by the Board.
- 2.13.3.3 The following general conditions shall apply, in addition to Section 2.15, District's Engineering Policies and any specific conditions set by the Engineer and the Board:
  - a. Materials for construction of pipelines shall be ductile iron or polyvinylchloride (PVC) in the class as approved by the Board and the Engineer. Ductile iron pipe and fittings shall be protected from corrosion by polyethylene encasement in conformance with ANSI/AWWA C105/A21.5-82.
  - b. No dead-end water lines shall be permitted except at the discretion of the Engineer, and in cases where circulation lines are necessary they shall be designed and installed as part of the water main extension and the cost paid by the Applicant.
  - c. All main extensions shall meet the requirements of Uniform Plumbing Code and State Health Regulations.

# 2.13.4 Oversize Main Policy

Should the District desire to install facilities greater than what is needed to meet the applicant's service demands as determined by the Engineer, the cost of the excess size of facilities shall be borne by the District.

#### 2.13.5 Out of District Extensions

Water and/or sewer service will not be extended to areas outside District's boundaries. Areas so located must be annexed to District prior to the installation of water and/or sewer mains and connection to District's systems.

## 2.13.6 Inspection Requirements

Main extensions will be inspected by the District or the Engineer. The cost of such inspection shall be paid by the applicant as stated in Section 2.10, "Water Rates, Fees and Charges," and Section 2.11, "Sewer Rates, Fees and Charges."

## 2.14 Wells

## 2.14.1 Protection of Groundwater

In order to protect the underground water basin, which constitutes the major source of the water supply for the District, those existing wells within a development which, in the opinion of the District, require sealing shall be sealed by the Developer at his expense in accordance with the District's specifications prior to initiation of water service within the development.

# 2.14.2 Standards

The following standards shall be used in the logging, test pumping, abandonment, design and construction of wells.

- a. State of Nevada, Division of Water Resources, Regulations for Drilling Water Wells.
- b. American Water Works Association (AWWA), Standard A100 for Deep Wells.
- c. The State Engineer's permit under which the well is to be drilled.

#### 2.14.3 Design Criteria

- 2.14.3.1 Local Conditions. Developing Engineer shall submit a report addressing items listed in AWWA A100 Sec. 1-13 and 1-14 prior to construction.
- 2.14.3.2 Casing. Casing size shall be suitable for installing a pump of adequate size as determined by the Developing Engineer, plus room for 2" sounding tube, 1" chlorination tube and ¼" air line. Material shall be suitable for placement in the quality of formation and easter encountered. Chemical and conductivity analysis of the formation and water shall be determined

via a test hole and submitted to the District as proof of suitability. Material shall be selected and approved prior to setting casing. Thickness shall conform to Regulations for Drilling Water Wells.

- 2.14.3.3 Well Screen. Well screen may be of continuous wire wrap design, or perforated casing. Opening shall be selected in consideration of gravel pack sieve analysis and formation sieve analysis. Sieve analysis and opening size shall be submitted to the District Engineer for approval prior to purchase. Material shall conform to requirements of 2.14.3.2.
- 2.14.3.4 Gravel Pack. All new wells shall include a gravel pack. Minimum pack thickness shall be 4". Uniformity coefficient shall be equal to or less than 2.50. Gravel source and gradation shall be approved by the District Engineer. Gravel pack shall be placed by reverse circulation.
- 2.14.3.5 Drilling Method. Preferred methods are direct or reverse circulation with drilling fluid (maximum Marsh viscosity 45 seconds). Other methods shall be submitted to the District Engineer for approval.
- 2.14.3.6 Plumbness and Alignment. All wells shall be tested in accordance with AWWA A100. Contractor shall be subject to the requirements of AWWA A100 Sec. 1-6.3.
- 2.14.3.7 Test Pumping. All wells shall be tested for yield and drawdown prior to final pump selection. Developer's Engineer shall submit test pump size and setting to the District Engineer for approval. Pumping shall consist of 8 hours minimum step test plus 64 hours minimum continuous test. Test results shall be submitted to the District Engineer.
- 2.14.3.8 Development. Wells shall be developed by pumping, surging, backwashing or other means until all traces of fines from gravel pack and formation no longer appear.
- 2.14.3.9 Disinfection. All wells shall be disinfected in accordance with AWWA A100. Developer shall have water samples taken and analyzed by a State approved laboratory to verify disinfection. Lab test records shall be submitted to the District Engineer.
- 2.14.3.10 Grouting and Sealing. All wells shall be grouted and sealed in conformance with the referenced standards (2.14.2).

# 2.15 Engineering Policies

2.15.1 General

The following engineering policies governing design, plan preparation and plan approval have been established to provide for an orderly development of the water and sewer systems within the District. Changes may be made in these policies from time to time. It shall be the responsibility of everyone engaged in work involving the District's facilities to keep themselves informed of any changes made.

2.15.2 Design.

Prior to the preparation of design plans for the water and/or sewer system to be installed within a development, the Developer's Engineer should obtain from the District a copy of the District's 1"=100' scale water and/or sewer system drawing for the area in which the development is located. It is also recommended that the Developer's Engineer arrange to meet with the District's Engineer to discuss any special requirements relative to the design and/or construction of the proposed water and/or sewer system.

2.15.3 Water System Design Criteria.

The following design criteria are to be used as a guide by the Developer's Engineer for the water system layout. The District's Engineer will review each proposed water system layout for adequacy and conformity with the District's Master Water Plan. All changes required by the District's Engineer in the proposed layout shall be made by the Developer's Engineer prior to approval of the plans by the District.

- 2.15.3.1 Specifications and Standard Details
  - 2.15.3.1.1 Specifications

All work shall conform to the latest edition <u>Standard Specifications</u> <u>for Public Works Construction</u>, (Orange Book).

2.15.3.1.2 Standard Details

Standard Details shall be as contained in the <u>Standard Details for</u> <u>Public Works Construction</u>, (Orange Binder) as used by Douglas County.

- 2.15.3.2 Location and Alignment
  - a. Generally, water mains should be located seven (7) feet off the street centerline on the north and east side of streets.
  - b. The location of water mains on frontage roads, divided roads, or roads one hundred (100) feet or wider, will be determined by the District.
  - c. There shall be at least five (5) feet horizontal clear distance between horizontal projections of the District's facilities and other facilities. There shall be a minimum of 10 feet horizontal separation between water and sewer lines. No less than eighteen (18) inches vertical clearance shall be provided where water and sewer lines cross. Common water and sewer trenches will not be permitted.

d. Water service connections and sewer laterals shall be located no closer than three (3) feet horizontally from the edge of the driveway. There shall be at least ten (10) feet of horizontal clearance between the water service and the sewer lateral, unless otherwise approved by the Engineer.

# 2.15.3.3 Sizing

- a. In general, extend water mains of the same size.
- b. No water main shall be smaller than six (6) inches in diameter.
- c. In general, six (6) inch and eight (8) inch water mains should be placed on alternate streets.
- d. Dead-end lines shall be permitted only with the approval of the Engineer.
- e. Easements shall be provided to cross-tie water mains in cul-de-sacs that are 500 feet or longer in length, and as may be required by the District.
- f. Generally, no water main smaller than eight (8) inches should be used on runs longer than 1,000 feet without looping.
- g. Water mains serving commercial, multiple residential or school development will be sized by the District's Engineer.
- h. Dead-end mains which serve a fire hydrant shall be a minimum of eight (8) inches in diameter.

# 2.15.3.4 Minimum Cover

The minimum depth of cover listed below shall be provided between the top of the water main and the undisturbed subgrade or finished grade whichever provides the greater cover.

	Undisturbed <u>Sub-grade</u>	Finished <u>Grade</u>
6" thru 12" Diameter	2'6"	3'6"
14" and Larger	3'0"	4'0"

The Developer's Engineer shall indicate on the plans the distance from finished pavement or road surface grade to the bottom of the undisturbed sub-grade.

2.15.3.5 Fire Flow Requirements

Fire flow requirements shall be determined by the Fire Chief. In General, sizing should be based on providing not less than 1000 gpm fire flow with

not more than 15 psi pressure loss from the nearest twelve (12) inches or larger water main, and a minimum residual pressure of 20 psi at time of maximum day domestic demand.

- 2.15.3.6 Appurtenances
  - 2.15.3.6.1 Valves
    - a. All line valves eight (8) inches and smaller shall be gate valves; all line valves larger than eight (8) inches shall be butterfly valves. Valves shall be "Mueller," or as approved otherwise by the District prior to installation.
    - b. Valves are to be arranged so as to provide minimum disruption of service in case of a water main break.
    - c. At least four (4) valves are to be installed at each cross.
    - d. At least three (3) valves are to be installed at each tee.
    - e. All galvanized pipe shall be wrapped in 10 mil thick tape to prevent corrosion.
  - 2.15.3.6.2 Fire Hydrants

The type or style and location of fire hydrants shall be determined by the District. Fire hydrants shall be Mueller Super Centurion 200 or approved equal, having a 5 1/4-inch main valve opening with two (2) 2 1/2-inch hose nozzles and one (1) 4 1/2-inch pumper nozzle.

- 2.15.3.6.3 Blowoffs
  - a. Permanent blowoffs are to be provided at all dead ends and at all low points as determined by the Engineer.
  - b. Temporary blowoffs shall be provided as necessary to pressure test and chlorinate the water mains.
- 2.15.3.6.4 Air and Vacuum and Air Release Valves

Air and vacuum and air release valves are to be installed at all high points in the water mains and where directed by the Engineer.

2.15.3.6.5 Service Connections

The minimum size service connection shall be 3/4-inch in diameter.

Service connections greater than 3/4-inch diameter shall be provided where necessary to satisfy the flow requirements of the Customer. Consultation with the District's Engineer is recommended for proper sizing of service connections.

As a general rule the following minimum service sizes will be required from the main to the meter(s).

Single Family homes	
Duplexes (2 living units)	1 inch
Triplexes (3 living units)	
Fourplexes (4 living units)	1 1/4 inch

2.15.3.6.6 Miscellaneous Appurtenances

Miscellaneous appurtenances such as cross-connection control devices, pressure regulators, detector checks, etc., will be required as dictated by specific needs. These appurtenances shall be noted on the plans as directed by the Engineer.

2.15.4 Sewer System Design Criteria.

## 2.15.4.1 General

The following design criteria are to be used as a guide by the Developer's Engineer for the sewer system layout. The District's Engineer will review each proposed sewer system layout for adequacy and conformity with the District's 2016 Sewer Master Plan. All changes required by the District's Engineer in the proposed layout in conformity with the 2016 Sewer Master Plan, shall be made by the Developer's Engineer prior to approval of the plans by the District.

The District's 2016 Sewer Master Plan was adopted on 5 October 2016 with the Board directing that a copy of the District's 2016 Sewer Master Plan be made available for inspection in the District's offices.

Sewage collection and treatment shall comply with the regulations imposed by State law, local ordinances and the Minden-Gardnerville Sanitation District (MGSD).

Sanitary sewer mains shall be extended to subdivision or development boundaries adjacent to undeveloped property for future extensions.

#### 2.15.4.2 Specifications and Standard Details

#### 2.15.4.2.1 Specifications

All work shall conform to the Standard Specifications for Public Works Construction, unless the requirements contained in this

Policies and Procedures Manual are more restrictive, in which case this Manual shall take precedence.

2.15.4.2.2 Standard Details

Standard Details shall be as contained in Appendix H of the Manual. Details not contained in Appendix H of the Manual shall be contained in the Douglas County Design Criteria and Improvement Standards.

## 2.15.4.3 Location and Alignment

- a. Generally, sewer mains should be located five (5) feet off the street centerline on the south and west side of streets.
- b. The location of sewer mains on frontage roads, divided roads, or roads one hundred (100) feet or wider, will be determined by the District.
- c. There shall be at least five (5) feet horizontal clear distance between horizontal projections of the District's facilities and other facilities. There shall be a minimum of 10 feet horizontal separation between water and sewer lines. Not less than eighteen (18) inches vertical clearance shall be provided where water and sewer lines cross. Common water and sewer trenches will not be permitted.

#### 2.15.4.4 Sizing

- a. New sewer systems shall be designed based on the following minimum daily per capita contributions:
  - i. Mains (8-inch diameter) 350 gallons per capita per day (peak flow)
  - ii. Trunk sewers (10-inch diameter up) 250 gallons per capita per day (peak flow).

and using the following minimum occupancy rates for contributing dwelling units:

Single Family	3.0 capita/dwelling unit
Condominium	2.0 capita/dwelling unit
Mobile Home	2.5 capita/dwelling unit
Apartment	2.0 capita/dwelling unit

- b. Sewer lines shall be designed to give mean velocities, during peak hour flow of not less than 2 feet per second and not greater than 10 feet per second. Depth of flow is not to exceed one-half full.
- c. A minimum Manning's "n" value of 0.013 shall be used for PVC pipe.

- d. No public sanitary sewer main shall have a pipe diameter of less than 8 inches.
- e. Sewer mains serving commercial, multiple residential or school development will be sized by the District's Engineer.

## 2.15.4.5 Minimum Slope

The following minimum slopes shall be provided:

#### <u>Pipe Size</u>

#### Minimum Slope

4" laterals	2.0%
6" laterals	1.0%
8" (serving 10 or less EDUs)	1.0%
8" (serving 11-20 EDUs)	0.6%
8" (serving above 20 EDUs)	0.4%
10"	0.3%
12"	0.22%

## 2.15.4.6 Minimum Cover

The minimum depth of cover listed below shall be provided between the top of the sewer main and the undisturbed subgrade or finished grade whichever provides the greater cover.

	Undisturbed <u>Subgrade</u>	Finished <u>Grade</u>
4" thru 8" Diameter	2'6"	3'6"
10" and Larger	3'0"	4'0"

The Developer's Engineer shall indicate on the plans the distance from finished pavement or road surface grade to the bottom of the undisturbed sub-grade.

#### 2.15.4.7 Laterals

- a. Individual service laterals to a public main are to be provided for each individual lot.
- b. Service laterals shall have a minimum pipe diameter of 4 inches with a minimum slope of 1/4 inch per foot and be constructed to the property line. A clean-out shall be constructed at the back of sidewalk, or at the property line if there is no sidewalk.
- c. Minimum depth of cover to top of service laterals at curb or edge of pavement shall be 4'-0".

#### 2.15.4.8 Manholes

2.15.4.8.1 Manholes shall be located at junction points, changes in horizontal and/or vertical alignment exceeding the maximum allowable pipe deflection, changes in conduit size and at the end of public lines unless otherwise approved by the Engineer. All pipe placed on curves shall meet manufacturer's recommendations for curved alignment. All curves, radii, length of pipe joints, and types of pipe shall be shown on the plans. Manholes shall be spaced no further apart than allowed by the following table:

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

#### MAXIMUM DISTANCE BETWEEN MANHOLES

\* 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.

- 2.15.4.8.2 Increasing Size When a smaller sewer flows into a larger sewer, the invert of the larger sewer shall be sufficiently lower to maintain the same hydraulic gradient.
- 2.15.4.8.3 Drop Manholes 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 the outgoing pipe.
- 2.15.4.8.4 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. All manholes must be water-tight. All pipe stubs or fittings shall have approved elastomeric seals conforming to ASTM F-477.

All bases must be precast unless otherwise approved by the District. If PVC pipe is used elastomeric seals shall be precast into the manhole base.

# 2.15.4.9 Sewerage Report

2.15.4.9.1 A sewerage report is required when the number of dwelling units exceed 10 or the number of fixture units exceed 200. The subdivider/developer shall determine the adequacy of the existing

sanitary sewer system to accommodate the proposed subdivision or development from the point of connection to a major sanitary sewer interceptor. Normally the adequacy can be determined based on the developed area contributing to the existing facility. However, if infiltration is a factor, metering will be required.

- 2.15.4.9.2 The following shall be addressed in the sewerage report to substantiate the design of the system.
  - a. Area of Project.
  - b. Tributary areas outside project.
  - c. Adjacent areas.
  - d. Contours as required by the District Engineer.
  - e. Line layout, pipe size, slope and material type.
  - f. Any non-domestic waste being introduced into system such as industrial process wastes, cooling waters, etc. and the types of pretreatment devices to be provided.
  - g. Calculations showing predicted average and peak flows at major junction points including flow coming from outside the project area.
  - h. Direction of flow.
  - i. Cumulative flow.
  - j. Zoning used to predict flows.
  - k. Special areas such as hospitals, schools, large office buildings, etc.
  - I. Boundaries of areas within the project which are tributary to points of major flow.
  - m. Design calculations (hydraulics, trench design, pipe structural design, etc.)

# 2.16 Conversion of ISDS to Sewer Service

#### 2.16.1 General

Pursuant to NRS 318.170 (1) (b), the District is authorized to compel all owners of the inhabited property within the District to connect to the District's sewer system. The District

may compel a connection by an owner of an inhabited property to such system if a service line is brought by the District to a point within (400) feet of the dwelling place.

The District has enacted these policies and procedures pursuant to its general welfare powers, and pursuant to NRS 318.170 (1) (b), in order to preserve the health and provide necessary and desirable sanitary regulations to the local population.

#### 2.16.2 Notice

The District Manager shall identify all those properties currently served by individual sewage disposal systems ("ISDS" or "septic systems"). The District shall cause a notice to be sent to the owners of those properties served by septic systems advising those owners of the District's sewer system. Such notice shall be sent by certified mail, return receipt requested.

#### 2.16.3 Recorded Notice

The District shall record a notice with the Office of the Douglas County Recorder's Office advising all those owners of inhabited property within the District currently served by septic systems of the District's Policies and Procedures regarding conversion of septic systems to the District-owned sewer system.

#### 2.16.4 Conversion Requirements

The following requirements shall be met by all homes within the District now served by a septic system:

- 2.16.4.1 All septic systems requiring repair shall not be repaired. All inhabited dwellings now served by a septic system in need of repair shall not be repaired, but shall be immediately connected to the District-owned sewer system.
- 2.16.4.2 All homes which close escrow prior to July 1, 1998 shall be connected to the District-owned sewer system prior to the close of escrow.
- 2.16.4.3 Regardless of circumstances, all inhabited dwellings currently served by a septic system shall be converted to the District-owned sewer system on or before July 1, 1998.
- 2.16.5 Compliance; District Action

In order to ensure that the edict of NDEP is met, and the requirements of NRS 318.170(1) (b) are complied with, the District shall take all action necessary to obtain compliance by use of all authorized means, including, without limitation, the following:

- 2.16.5.1 The District Manager shall solicit, by request for proposals, a contractor who shall provide to the District septic/sewer conversion services at a uniform price for all conversions. The District shall select a contractor by request for proposals, and a public bidding process by the use of the procedures for public works contracts set forth in NRS 338.010 et seq. The District shall solicit bids, and award a bid to the lowest responsible and responsive contractor to provide to the District the septic/sewer conversion services.
- 2.16.5.2 Should the owner of an inhabited property fail to comply with the policies and proceduresset forth in paragraph 2.16.4, the District shall compel the owner of the inhabited property to use the District's system by causing a connection of the inhabited dwelling to the District's sewer system utilizing the contractor selected pursuant to these policies and procedures.
- 2.16.5.3 Prior to causing a connection by an owner of an inhabited property to the District's sewer system, the District shall provide sixty (60) days' written notice to the owner of the inhabited dwelling that the dwelling shall be connected, or the District shall cause the connection. The notice provided may be the mailed notice (certified mail) and the recorded notice which the District shall cause to be sent to each inhabited property owner when these policies and procedures become effective.
- 2.16.5.4 Sixty (60) days or more prior to July 1, 1998, the District shall cause an additional notice to be sent by certified mail to each inhabited property owner of property not then served by the District-owned sewer system that the District shall, pursuant to its statutory authority, cause the inhabited property to be connected to the District-owned sewer system.
- 2.16.5.5 In all cases where the District causes a connection to the District-owned sewer system to be made by a person other than the owner, the District shall file a lien against the property for the expense incurred in making the connection.

# 2.16.6 Penalties

Any person who violates these policies and procedures shall be punished by a fine not to exceed \$100.00 or by imprisonment not to exceed one month, or by both fine and imprisonment. The District may also seek any other legal or equitable remedy to compel compliance with these policies and procedures.

# 2.17 Water Service Cross-Connection Control

2.17.1 Purpose

The purpose of this policy is:

- a. To protect the public water supply against actual or potential contamination through cross-connections by isolating sources of contamination that may occur within a water user's premises because of some undiscovered or unauthorized cross connection on the premises;
- b. To eliminate existing connections between drinking water systems and other sources of water that are not approved as safe and potable for human consumption;
- c. To eliminate cross-connections between drinking water systems and sources of contamination; and
- d. To prevent the making of cross-connection in the future.

## 2.17.2 Definitions

2.17.2.1 "Air-Gap Separation ("AG"):

"Air gap separation," means a physical break between a supply pipe and a receiving vessel. The air-gap shall be at least double the diameter of the supply pipe measured vertically above the top rim of the vessel, but in no case less than one inch (1").

2.17.2.2 Approved Backflow Prevention Assembly

"Approved Backflow Prevention Assembly" means an assembly that has been manufactured in full conformance with the standards established by the American Waterworks Association entitled: "AWWA C506 (Current Revision) Standards for Reduced Pressure Principle and Double Check Valve Backflow Prevention Devices", and have passed laboratory and field evaluation tests performed by a recognized testing organization which has demonstrated its competency to perform such tests to the Satisfaction of the District.

2.17.2.3 Approved Water Supply

"Approved Water Supply" means any water supply whose potability is regulated by a state or local health agency.

2.17.2.4 Auxiliary Supply

"Auxiliary Supply" means any water supply on or available to the premises other than the approved water supply.

2.17.2.5 AWWA Standard

"AWWA Standard" means an official standard developed and approved by the American Water Works Associations (AWWA). 2.17.2.6 Backflow

"Backflow" means a flow condition, caused by a differential in pressure, which causes the flow of water or other liquids, gases, mixtures or substances into the distributing pipes of a potable supply of water from any source or sources other than an approved water supply source. Back siphonage is one cause of backflow. Back pressure is the other cause.

2.17.2.7 Contamination

"Contamination" means a degradation of the quality of the potable water by any foreign substance which creates a hazard to the public health, or which may impair the usefulness or quality of the water.

2.17.2.8 Cross-Connection

"Cross-connection" as used in this policy, means any unprotected actual or potential connection between a potential water system used to supply water for drinking purposes and any source or system containing unapproved water or substances that is not or cannot be approved as safe, wholesome and potable. By-pass arrangements, jumper connection, removable sections, swivel or changeover assemblies or other assemblies through which backflow could occur shall be considered to be crossconnections.

2.17.2.9 District

"District" means the Gardnerville Ranchos General Improvement District (GRGID).

2.17.2.10 Double Check Valve Assembly, (DC)

"Double check valve assembly" means an approved backflow prevention assembly of two (2) internally loaded, independently acting check valves, including resilient seated shut-off valves on each end of the assembly with test cocks for testing the water-tightness of each valve.

2.17.2.11 Person

"Person" means any individual, corporation, company association district, partnership, municipality, public utility, or other public body or institution.

2.17.2.12 Premises

"Premises" means any and all areas on a water user's property which are served or have the potential to be served by the public water system.

2.17.2.13 Public Water System

"Public Water System" means a system for the provision of piped water to the public for human consumption that has fifteen (15) or more service connections or regularly serves an average of twenty-five (25) individuals daily at least sixty (60) days out of the year.

2.17.2.14 Reclaimed Water

"Reclaimed water" means a wastewater, which, as a result of treatment, is suitable for uses other than potable use.

2.17.2.15 Reduced Pressure Principle Backflow Prevention Assembly

"Reduced pressure principle backflow prevention assembly" means an approved backflow prevention assembly incorporating two (2) internally loaded check valves including resilient seated shut-off valves on each end of the assembly, and equipped with necessary test cocks for testing the assembly.

2.17.2.16 Service Connection

"Service connection" refers to the point of connection of a user's piping to the water supplier's facilities.

2.17.2.17 Water Supplier

"Water supplier" means the person who owns or operates an approved water supply system.

2.17.2.18 Water User

"Water user" means any person obtaining water from an approved water supply system or public water system.

# 2.17.3 Cross-Connection Protection Requirements

- 2.17.3.1 General Provisions
  - 2.17.3.1.1 Unprotected cross-connections with the public water supply are prohibited. Nevada Administration Code ("NAC) 445A. 67185-67255 requires the State Health Officer's written approval to interconnect water supplies.
  - 2.17.3.1.2 Whenever backflow protection has been found necessary, the District will require the water user to install an approved backflow prevention assembly by and at the user's expense for continued services or before new service will be granted. For new water meter installation, the required backflow assembly shall be installed, inspected approved and certified test results provided to the District within five (5) days of meter installation, unless the District Manager or designee approves otherwise. The service will

be locked off it inspections and certifications are not completed as specified.

2.17.3.1.3 Wherever backflow protection has been found necessary on a water supply line entering a water user's premises, then any and all water supply lines from the District's mains entering such premises, buildings, or structures shall be protected by an approved backflow prevention assembly. The type of assembly to be installed will be in accordance with the requirements of this policy.

## 2.17.3.2 Where Protection is Required

- 2.17.3.2.1 Each service connection from the District water system for supplying water to premises having an auxiliary water supply shall be protected against backflow of water from the premises into the public water system unless the auxiliary water supply is an approved water supply. NAC 445A, Section 408 requires the State Health Officer's written approval to interconnect water supplies.
- 2.17.3.2.2 Each service connection from the District water system for supplying water to premises on which any substance is handled in such fashion as may allow its entry into the water system shall be protected against backflow of the water from the premises into the public system. This shall include the handling of process waters and waters originating from the District water system which have been subjected to deterioration of sanitary quality.
- 2.17.3.2.3 Backflow prevention assemblies shall be installed on the service connection to any premises having
  - a. Internal cross-connections that cannot be permanently corrected and controlled to the satisfaction of the District, or
  - b. Intricate plumbing and piping arrangements or where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not cross-connections exist.

# 2.17.3.3 Type of Protection is Required

2.17.3.3.1 The type of protection that shall be provided to prevent backflow into the approved water supply shall be commensurate with the degree of hazard that exists on the water user's premises. The type of protective assembly that shall be required (listed in an increasing level of protection) includes: double check valve assembly (DC), reduced pressure principle backflow prevention assembly (RP), and an air-gap separation (AG). The water user may choose a higher level of protection than required by the District. The minimum types of backflow protection required to protect the approved water supply at the user's water connection are in NAC 445A.67215 through NAC 445A.67265. Situations that are not covered in those sections of the NAC shall be evaluated on a case-by-case basis and the appropriate backflow protection shall be determined by the District.

- 2.17.3.3.2 When two (2) or more services supply water from street mains to the same building, structure, or premises through which an interstreet main flow may occur, each water service shall have at least a standard check valve located adjacent to and on the property side of the respective meters. Such check valves shall not be considered adequate if backflow protection is deemed necessary to protect the mains from pollution or contamination, in such cases the installation of approved backflow assemblies at such service connections shall be required.
- 2.17.4 Backflow Protection Assemblies
  - 2.17.4.1 Approved Backflow Prevention Assemblies
    - 2.17.4.1.1 Only backflow prevention assemblies which have been approved by the District as listed on the USC CCC Manual at https://fcchr.usc.edu/list.html shall be acceptable for installation by a water user connected to the District's potable water system.
    - 2.17.4.1.2 The District will provide, upon request, to any affected user a list of approved backflow prevention assemblies.
  - 2.17.4.2 Backflow Prevention Assembly Installations
    - 2.17.4.2.1 Backflow prevention assemblies shall be installed in a manner prescribed in Standard Details for Public Work Construction, as adopted by the District. Location of the assemblies shall be as close as practical to the user's service connection. The District shall have the final authority in determining the required location of a backflow prevention assembly.
      - 2.17.4.2.1.1 Air-Gap Separation (AG)

The air-gap separation shall be located on the user's side of and as close to the service connection as is practical. All piping from the service connection to the receiving tank shall be above grade and be entirely visible. No water use shall be provided from any point between the service connection and the air-gap separation. The water inlet piping shall terminate a distance of at least two pipe diameters of the supply inlet, but in no case less than one inch above the overflow rim of the receiving tank.

2.17.4.2.1.2 Reduced Pressure Principle Backflow Prevention Assembly (RP)

> The approved reduced pressure principle assembly shall be installed on the user's side of and as close to the service connection as is practical. The assembly shall be installed a minimum of twelve inches above grade and not more than thirty-six inches above grade, measured from the bottom of the assembly, and with a minimum of twelve inches side clearance. The assembly shall be installed so that it is readily accessible for maintenance and testing. Water supplied from any point between the service connection and the RP assembly shall be protected in a manner approved by the District.

2.17.4.2.1.3 Double Check Valve Assembly (DC)

The approved double check valve assembly shall be installed on the user's side of and as close to the service connection as it practical. The DC shall be installed above grade, if possible, and in a manner where it is readily accessible for testing and maintenance. If a double check valve assembly is put below grade it must be installed in a vault such that there is a minimum of six inches between the bottom of the vault and the bottom of the assembly:

That the top of the assembly is a maximum of eight inches below grade; and there is a minimum of twentyfour inches of clearance between the side of the assembly with the test cocks and the side of the vault, and so there is a minimum of twelve inches clearance between the other side of the assembly and the side vault. Special consideration must be given to double check valve assemblies of the "Y" type. These assemblies must be installed on their "side" with the test cocks in a vertical position so that either check valve may be removed for service without removing the assembly.

Vaults that do not have an integrated floor must be placed on a three-inch layer of gravel.

- 2.17.4.3 Backflow Prevention Assembly Testing and Maintenance
  - 2.17.4.3.1 The owner of any premises on which, or on account of which, backflow prevention assemblies are installed shall have the assemblies tested by a certified backflow prevention assembly tester who has demonstrated their competency in testing of these assemblies to the District's satisfaction. Backflow prevention

assemblies must be tested at least annually and immediately after installation, relocation or repair. The District may require a more frequent testing schedule if it is determined to be necessary. No assembly shall be placed back in service unless it is functioning as required. A report in a District approved form is to be filed with the District each time an assembly is tested, relocated, or repaired. These assemblies shall be serviced, overhauled, or replaced whenever they are found to be defective and all costs of testing, repair, and maintenance shall be borne by the water user. The District will supply affected water users with a list of persons acceptable to the District to test backflow prevention assemblies. The District will notify affected customers by mail when periodic testing of an assembly is required, and also supply users with the necessary forms which must be filled out each time an assembly is tested or repaired.

- 2.17.4.3.2 Upon request the District will test or cause to be tested a water user's backflow prevention assembly to fulfill the requirements for this policy. The water user will be charged on the next regular water bill for the test and any maintenance found necessary to keep the assembly in working order.
- 2.17.4.4 Backflow Prevention Assembly Removals
  - 2.17.4.4.1 Approval

Approval must be obtained from the District before a backflow prevention assembly is removed, relocated, or replaced.

2.17.4.4.2 Removal

The use of an assembly may be discontinued and the assembly removed from service upon presentation of sufficient evidence to the District to verify that a hazard no longer exists or is not likely to be created in the future.

2.17.4.4.3 Relocation

An assembly may be relocated following confirmation by the District that the relocation will continue to provide the required protection and satisfy installation requirements. A retest will be required following the relocation of the assembly.

2.17.4.4.4 Repair

An assembly may be removed for repair, provided the water use is either discontinued until repair is completed and the assembly is tested and returned to service, or the service connection is equipped with other backflow protection approved by the District. A retest will be required following the repair of the assembly. 2.17.4.4.5 Replacement

An assembly may be removed and replaced provided the water use is discontinued until the replacement assembly is installed and tested. All replacement assemblies must be approved by the District and must be commensurate with the degree of hazard involved. A retest will be required following the replacement of the assembly.

- 2.17.5 Administrative Procedures
  - 2.17.5.1 Water System Survey
    - 2.17.5.1.1 The District shall review all requests for new services to determine if backflow protection is needed. Plans and specifications must be submitted to the District upon request for review of possible crossconnection hazards as a condition of service for new service connections. If it is determined that a backflow prevention assembly is necessary to protect the public water system, the required assembly must be installed before service will be granted.
    - 2.17.5.1.2 The District may require an on-site inspection to evaluate crossconnection hazards. The district will transmit a written notice requesting an inspection appointment to each affected water user. Any water user who cannot or will not allow an on-premises inspection of premises piping systems shall be required to install the backflow prevention assembly or air-gap the District considers necessary.
    - 2.17.5.1.3 The District may, at its discretion, require a re-inspection for crossconnection hazards of any premises to which it serves water. The District will transmit a written notice requesting an inspection appointment to each affected water user. Any water user who cannot or will not allow an on premises inspection of premises piping systems shall be required to install the backflow prevention assembly or air-gap the District considers necessary.
  - 2.17.5.2 Customer Notification Assembly Installation
    - 2.17.5.2.1 The District will notify the water user of the survey findings, listing the corrective actions to be taken if any are required. A period of sixty (60) days will be given to complete all corrective actions required, including installation and testing of approved backflow prevention assemblies or air-gap, unless a written extension is granted.
    - 2.17.5.2.2 A second notice shall be sent to each water user who does not take the required corrective actions within the sixty (60) day period

prescribed in the first notice. The second notice will give the water user a four (4) week period to take the required corrective action. If no action is taken within the four (4) week period, the District may terminate water service to the affected water user until the required corrective actions are taken.

- 2.17.5.3 Customer Notification Testing and Maintenance
  - 2.17.5.3.1 The District will notify each affected water user when it is time for the backflow prevention assembly or air-gap, installed on a service connection, to be tested, or to be inspected. This written notice shall give the water user thirty (30) days to have the assembly tested or air-gap inspected, and supply the water user with the necessary form to be completed and resubmitted to the District.
  - 2.17.5.3.2 A second notice shall be sent to each water user who does not have the backflow prevention assembly tested or air-gap inspected within the thirty (30) day period allowed as prescribed in the first notice. The second notice will give the water user a two (2) week period to have the backflow prevention assembly tested or the air-gap inspected. If so action is taken within the two (2) week period, the District may terminate water service to the affected water user until the subject assembly is tested, or air-gap inspected.

# 2.17.6 Water Service Termination

#### 2.17.6.1 General

When the District encounters water users that represent a clear and immediate hazard to the water supply that cannot be immediately abated, the District shall institute the procedure for discontinuing the District's water service.

2.17.6.2 Basis for Termination

Conditions or water uses that create a basis for water service termination shall include, but are not limited to, the following items:

- a. Refusal to install a required backflow prevention assembly or air-gap separation;
- b. Refusal to test a backflow prevention assembly or inspect an air-gap separation;
- c. Refusal to repair a faulty backflow prevention assembly;
- d. Refusal to replace a faulty backflow prevention assembly;

- e. District or indirect connection between the public water system and a sewer line;
- f. Unprotected direct or indirect connection between the public water system and a system or equipment containing contamination;
- g. Unprotected direct or indirect connection between the public water system and an auxiliary water system;
- h. A situation that presents an immediate health hazard to the public water system.
- 2.17.6.3 Water Service Termination Procedures.
  - 2.17.6.3.1 For conditions 1, 2, 3, or 4 of 2.17.6.2, the District will terminate service to a customer's premises after two written notices have been sent specifying the corrective action needed and the time period in which it must be taken. If no action is taken within the allotted time period water service may be terminated.
  - 2.17.6.3.2 For conditions 5, 6, 7, or 8 of 2.17.6.2, the District will take the following steps:
    - a. Make a reasonable effort to advise the water user of intent to terminate water service; or

# 2.18 2017 Water Master Plan

2.18.1 On 2 August 2017 the Board of Trustees of the Gardnerville Ranchos General Improvement District adopted a 2017 Water Master Plan, as amended. A copy of the 2017 Water Master Plan shall be made available to the public for inspection and copying at the District's office located at 931 Mitch Drive, Gardnerville, Nevada. The 2017 Water Master Plan may be copied at the request of any member of the public; provided, however, that the cost of reproduction of a copy of the 2017 Water Master Plan shall be paid to the District prior to the reproduction of the 2017 Water Master Plan.

# 2.19 Special Assessments

2

2.19.1 Special Assessment Created November 15, 2019

The District created a Special Assessment by action of the Board on November 12, 2019. The Special Assessment was created to ensure the District has sufficient resources to finance future infrastructure needs as a result of future development. Any lot created after November 15, 2019

will be subject to the Special Assessment. Any lot already existing in the District prior to November 15, 2019 will not be subject to the Special Assessment. Upon adoption, the Special Assessment was \$4,431.00 per EDU. The actual value of the Special Assessment will be reviewed annually to ensure that it is appropriate for the needs of the District's future infrastructure upgrades.

The revenues created by the SA will be deposited into a Special Assessment account and will be tracked accordingly. The Special Assessment account will be established as a Committed Fund account, thereby requiring a vote by the Board of Trustees to use money from that account for a future project. The intent at the time of creation of the SA was that the funds would only be used to design, plan for and construct infrastructure needs associated with the creation of new lots within the District. Needed infrastructure could include new tanks, new wells, new transmission mains or upsizing existing mains, new treatment facilities, etc. Needed infrastructure should not include the repair / replacement of existing facilities; including Wells 1 - 9, Long Valley booster station, the 1.5 MG storage tank or the 3.0 MG storage tank.

# MEMORANDUM

DATE:	February 25, 2019
TO:	GRGID, Greg Reed, District Manager
FROM:	Lumos & Associates, Kristin Tokheim, P.E.
SUBJECT:	GRGID Special Assessment Fee Development

# Introduction

The existing water system for the Gardnerville Ranchos General Improvement District (GRGID or District) is fully allocated to existing users and does not have adequate capacity to accommodate growth. A special assessment fee is one potential method to offset the costs for critical water system infrastructure needed to support future developments that will receive water service from the District. This technical memorandum has been prepared to document the methodology, cost factors and assumptions, and calculation of a recommended special assessment fee. The objectives in developing a special assessment fee are as follows:

- To fund and plan for development driven infrastructure needs without burdening existing ratepayers and while still encouraging growth.
- To develop a fee that is reasonable and defensible and aligns with projections and costs in the most recent Water Master Plan.

The special assessment fee will be administered by GRGID in accordance with Nevada Revised Statute (NRS) Chapter 318 General Improvement Districts, Section 350 (*Assessment to Pay Expenses of* 

*Improvements*). The GRGID special assessment fee was developed considering established protocols and guidance as referenced below:

 American Water Works Association (AWWA) Journal Article, Utility Impact Fees: Practices and Challenges (Mantz, B. A. and Thomas, H. L., 2012, <u>https://doi.org/10.5942/jawwa.2012.104.0053</u>)

# Description of Methodology

The recommended methodology in developing the special assessment fee is to determine the total costs of development-driven improvements required over a defined timeline and to allocate those costs equally and proportionately to new growth on the basis of an equivalent dwelling unit (EDU) and water demands from the 2017 Water Master Plan.

Timelines considered in developing the special assessment fee include near-term growth (5-10 year range), long-term growth (10-20 year range), and system buildout. The near-term water supply strategy defined in the 2017 Water Master Plan is to continue developing the wellfield. Improvements required for long-term growth and ultimate buildout of the water system are difficult to define with policy level decisions required for future water supply strategies (surface water supply/treatment, groundwater supply/treatment, regional connection). Because developer-driven improvements are more clearly defined in the near-term, the recommended timeline for the special assessment fee development is the 5-10 year range to align with the 5-10 year Capital Improvement Plan (CIP) defined in the 2017 Water Master Plan.

Developer-driven improvements to be included in the special assessment fee calculation are as follows:

- New Well and Transmission Main
- New Storage Tank
- Relocation of Existing 12-inch Waterline from High Tank (required for development in Receiving Areas identified in 2017 Water Master Plan)

Capacity improvement projects that benefit existing users should not be incorporated in the special assessment fee calculation and include the following:

- Well 5 Water Quality Zone Testing and Improvements
- Well 2 Redirect To High Side Pressure Zone
- Long Valley Booster Pump Station Upgrades

Other methods considered in the special assessment fee development included a cost-recovery fee calculation in which new development pays for its share of remaining capacity in the existing water system from which the new growth will benefit. This method was determined not applicable as current capacity in the water system is already designated for existing users and infill areas (vacant single-family lots identified in the Master Plan). In other words, current system capacity is 100 percent accounted for within the existing water service area.

#### **Cost Factor Assumptions**

The following cost factors and assumptions were used in calculating the special assessment fee based on input from GRGID:

• Construction costs and non-construction costs (design, construction management, permitting)

- New Storage Tank
  - \$1 per gallon per 2017 Water Master Plan CIP costs.
- New Well
  - Assume capacity of new well at 1,200 gallons per minute (gpm) based on average capacity of existing District wells.
  - Well drilling and equipping cost of \$1,386,000 per low bid results for Well 4 Replacement Project in August 2018.
  - New 12-inch transmission main will be required to connect well to existing system with assumed length of 5,000 linear feet (LF) at \$100 per LF (unit cost factor from 2017 Water Master Plan).
  - Power to new well site will be required at an estimated cost of \$20,000.
- 12-inch Waterline Relocation from High Tank
  - Total length of waterline to be relocated is 2,800 LF at \$100 per LF (unit cost factor from 2017 Water Master Plan).
  - Two connections to existing 12-inch waterline required at an assumed cost of \$5,000 per connection.
  - Allocate cost of waterline relocation to growth anticipated for 5-10 year CIP. The 10-year growth projection in the 2017 Water Master Plan is 730 EDUs.
- Acquisition of land and/or easements
  - New Storage Tank
    - Additional land not required for a new storage tank (land available at existing site).
  - New Well
    - Assume area of 0.2 acres required for a new well site based on average areas for other District well sites.
    - Estimated cost for new land is \$100,000 per acre.
- Costs of inflation 2% per year (assume timing of infrastructure at 7 years; midpoint of 5-10 year CIP from current).
- Financing costs 3% per year (assume loan term of 20 years with annual repayments).
- Administrative costs for management of assessment fee program 0.5% of improvement costs.

# Water Demands and Sizing Criteria

Demand factors from the Master Plan are summarized in Table 1 with EDU conversion factors assuming one EDU is equal to one single-family residential unit. The special assessment fee will be on the basis of an EDU and conversion factors can be applied to adjust the fee appropriately for land uses other than single-family residential.

Land Use	Water Demand Factor	EDU Conversion Factor
Single-Family Residential	640 gpd/unit	1.00 EDUs/unit
Single-Family Estates (2/3 acre and larger lots)	1,310 gpd/unit	2.05 EDUs/unit
Multi-Family Residential	370 gpd/unit	0.58 EDUs/unit
Commercial/ Industrial	2,000 gpd/ac	3.13 EDUs/ac
Community/ Public	720 gpd/ac	1.13 EDUs/ac
Schools	1,800 gpd/ac	2.81 EDUs/ac
Parks	3,000 gpd/ac	4.69 EDUs/ac

# Table 1: Water Demand and EDU Conversion Factors

Sizing of the development-driven infrastructure are based on criteria defined in the 2017 Water Master Plan as summarized in Table 2. Each additional EDU will require 1.11 gpm of well capacity and 680 gallons of storage.

Parameter	Value
2017 Master Plan Demands & Factors	
ADD per EDU, gpd (per Table 1)	640
MDD/ADD Peaking Factor	2.50
PHD/MDD Peaking Factor	1.50
Well Sizing Criteria	
Capacity Equivalent to MDD, gpm/EDU	1.11
Storage Tank Sizing Criteria	
Operating (6 hrs of PHD - MDD), gal/EDU	200
Emergency (75% of ADD), gal/EDU	480
Fire, gal	N/A <sup>1</sup>
Total, gal/EDU	680

# Table 2: Infrastructure Sizing Criteria

<sup>1</sup> Fire storage already accounted for in existing storage tank.

### **Special Assessment Fee Calculation**

The special assessment fee calculation is provided in Table 3 for the anticipated development-driven projects considering the cost factor assumptions and sizing criteria defined in this memorandum. The recommended special assessment fee is \$4,431 per EDU.

			Project	Project	Project Cost Adders			
Project	Cost per Unit Capacity	Capacity Required per EDU	Cost (Present Value) \$/EDU	Cost with 2% Inflation <sup>1</sup> \$/EDU	3% Interest (20-Yr) \$/EDU	0.5% Admin. Cost \$/EDU	Total Fee \$/EDU	
New Storage Tank	\$1/gal	680 gal	\$680.00	\$781.11	\$268.95	\$3.91	\$1,053.97	
New Well <sup>2</sup>	\$1,605/gpm	1.11 gpm	\$1,781.55	\$2,046.44	\$704.62	\$10.23	\$2,761.29	
12-inch Waterline Relocation <sup>3</sup>	-	-	\$397.26	\$456.33	\$157.12	\$2.28	\$615.73	
Totals			\$2,858.81	\$3,283.88	\$1,130.69	\$16.42	\$4,430.99	
Special Assessment Fee per EDU			per EDU	\$4,431				

<sup>1</sup> For inflation, assume improvements constructed in 2025 (7 years from current, midway through 5-10 year CIP).

<sup>2</sup> Costs per well: \$1,386,000 for well drilling/equipping, \$20k for land, \$20k for power, and \$500k for 5,000 LF transmission main = \$1,926,000 total. Cost per unit capacity for 1,200 gpm well = \$1,605/gpm.

<sup>3</sup> Costs for waterline relocation: \$280k for 2,800 LF of 12-inch waterline, \$10k for two (2) connections to existing system = \$290,000 total. Divide cost over 730 EDUs projected for 10-year growth in 2017 Water Master Plan.

The recommended special assessment fee schedule for new development is presented in Table 4 below based on land use areas and EDU conversion factors from Table 1.

## Table 4: Special Assessment Fee Schedule

Land Use Type	EDU Conversion Factor	Special Assessment Fee
Single-Family Residential	1.00 EDUs/unit	\$4,431/unit
Single-Family Estates (2/3 acre and larger lots)	2.05 EDUs/unit	\$9,084/unit
Multi-Family Residential	0.58 EDUs/unit	\$2,570/unit
Commercial/Industrial	3.13 EDUs/unit	\$13,869/unit
Community/Public	1.13 EDUs/acre	\$5,007/unit
Schools	2.81 EDUs/acre	\$12,451/unit
Parks	4.69 EDUs/acre	\$20,781/unit

# Implementation Recommendations

Considerations for implementation and administration of the special assessment fee are outlined below.

- A resolution and policy language for the special assessment fee will need to be developed for review by the Board of Trustees and adoption into the GRGID Policies and Procedures Manual.
- Parcels and developments subject to a special assessment fee need to be clearly defined in the policy language.
  - Any newly created parcels within the District or annexed into the District should be subject to a special assessment fee.

- Infill areas within the District should not be charged an assessment fee (i.e., vacant single-family lots that are already mapped and are identified in the 2017 Water Master Plan as infill).
- The special assessment fee should be reevaluated every three (3) years, or more often, to adjust for development trends, recent water demands, master plan updates, changes in cost factors (e.g. costs of inflation), etc.
- In administering the special assessment fee, GRGID should avoid double payment situations where a property owner could make future contributions towards the capital cost of a public facility that is already accounted for with other fees (e.g., when a developer pays both an annexation fee and a special assessment fee there could be overlap).
- Credits should be considered for dedication of public sites by developers for infrastructure specifically needed for growth (e.g. well site dedication).
- Financing of growth-driven improvements:
  - Financing methods may include, but not be limited to, developer reimbursement, loans through State Revolving Fund (SRF), and existing GRGID reserves.
  - Existing ratepayers should not be required to contribute to the costs of infrastructure required by future development.
- Timing and sizing of growth-driven improvements:
  - Consider infrastructure needs for near-term growth versus the oversizing of new infrastructure to accommodate additional future growth.

Determine demand triggers for construction of improvements (e.g. how many new homes can be accommodated with emergency reserves in existing storage tanks as temporary solution).

# 2.19.2 Notice of Public Hearing



# NOTICE OF PUBLIC HEARING

# INTENT TO CREATE SPECIAL ASSESSMENT FEE

The Gardnerville Ranchos General Improvement District (GRGID) hereby notices that the District will hold a public hearing on October 2, 2019 at 6:00 p.m. at the District's office at 931 Mitch Drive, Gardnerville Ranchos to discuss and take action regarding the creation of a special assessment for future development within the District.

New development within the District is currently assessed a sewer connection fee of \$6,300.00 for a  $\frac{3}{4}$  inch water service and a water connection fee of \$1,855.00 for that same  $\frac{3}{4}$  inch service. The cost of the purchase of the water meter and the installation of that meter are also the responsibility of the new developer / homeowner.

GRGID is considering the implementation of a special assessment to be applied to all newly created lots within the District and would be charged as follows:

	EDU Conversion	Special
Land Use Type	Factor	Assessment Fee
Single-Family Residential	1.00 EDUs/unit	\$4,431/unit
Single-Family Estates (2/3 acre and larger lots)	2.05 EDUs/unit	\$9,084/unit
Multi-Family Residential	0.58 EDUs/unit	\$2,570/unit
Commercial/Industrial	3.13 EDUs/unit	\$13,869/unit
Community/Public	1.13 EDUs/acre	\$5,007/unit
Schools	2.81 EDUs/acre	\$12,451/unit
Parks	4.69 EDUs/acre	\$20,781/unit

The Special Assessment will not apply to any lots that are already within the District's boundaries.

All persons are invited to participate in the public hearing. Questions or comments may be delivered to the District at 931 Mitch Drive, Gardnerville 89460 or emailed to the District Manager at <u>agreed@grgid.com</u>.

Greg Reed District Manager

# 2.19.3 Business Impact Statement



# **BUSINESS IMPACT STATEMENT**

The following Business Impact Statement was prepared pursuant to NRS 237.090 to address the proposed impact of Resolution 19 - 05 which would create a Special Assessment for all newly created lots within the District of \$4,431.00 per single family residential Equivalent Dwelling Unit (EDU).

1. The following constitutes a description of the number and manner in which comment was solicited from affected businesses, a summary of their responses and an explanation of the manner in which other interested persons may obtain a copy of the summary. (List all trade association or owners and officers of businesses likely to be affected by the proposed rule that have been consulted).

The draft Resolution 19 – 05 was mailed to the Home Builders Association, the Chamber of Commerce, Nevada Association of Realtors, Nevada Association of Real Estate Brokers, Associated General Contractors of Nevada. The Resolution was posted on the District's website and at the District's office at 931 Mitch Drive, Gardnerville, Nevada.

2. The estimated economic effect of the proposed rule on businesses, including, without limitation, both adverse and beneficial effects, and both direct and indirect effects:

Adverse effects: Currently, the District imposes a \$1,855.00 water connection fee and a \$6,300.00 sewer connection fee to all new single family homes constructed within the District's service territory, for a total of \$8,155.00. The proposed Special Assessment will add \$4,431.00 to the cost of constructing a new home within the District.

Beneficial effects: It is estimated that this increase will allow the District to raise approximately an additional \$8,800,000.00 over the probable build out of the District (2,000 additional homes over 620 acres) which will allow the District to install / construct \$8,800,000.00 of additional water infrastructure.

Direct effects: The passage of this Resolution will directly increase the cost of construction of new homes within the District by \$4,431.00 per EDU.

Indirect effects: The passage of this Resolution is likely to have indirect effects. However, at this time, those effects cannot be quantified.

3. The following constitutes a description of the methods the GRGID considered to reduce the impact of the proposed rule on businesses and a statement regarding whether any, and if so which, of these methods were used: (Include whether the following was considered: simplifying the proposed rule; establishing different standards of compliance for a business; and if applicable, modifying a fee or fine set forth in the rule so businesses could pay a lower fee or fine).

GRGID has evaluated all possible mechanisms to fund future infrastructure construction within the District. The District currently has sufficient infrastructure to meet the needs of our current residents. Since future infrastructure improvements will be necessary to accommodate future development, it is appropriate that such future improvements are funded by future development. It would be inappropriate to burden existing customers with the costs of new infrastructure required solely for future development.

4. GRGID estimates the annual cost to the GRGID for enforcement of the proposed Resolution is: \$0.00

The District has the staff and internal processes that will allow the District to collect the new Assessment fees with no additional costs to the District.

- 5. The proposed Resolution provides for a new fee and the total amount expected to be collected is: \$8,800,000.00.
- 6. The money generated by the new Assessment will be used by GRGID to:

The money generated by the new Assessment will be placed in a dedicated account within the water enterprise fund to be used to fund future infrastructure upgrades such as new storage tanks, new wells and booster facilities necessitated by the new development.

7. The proposed rule is not duplicative, or more stringent than existing federal, state or local standards.

# 3.0 STREETS

## 3.1 General

- 3.1.1 Unless otherwise specified by District ordinance, Standard Specifications and Details for Public Works Construction or items in this section, design of all streets and related improvements shall conform to the following: "GUIDELINES FOR URBAN MAJOR STREET DESIGN," published by the Institute of Transportation Engineers, and AASHTO "A Policy on Geometric Designs of Highways and Streets", latest editions. The more restrictive standard shall prevail for design.
- 3.1.2 Street widths and alignments shall generally conform to the adopted Master Plan for Douglas County and elements thereof. All public streets within a subdivision or development, shall be improved and conform to District standards. Additional right-of-way shall be provided near intersections as required by the District Engineer in order to facilitate turning movements.
- 3.1.3 At least two means of ingress and egress to District standards shall be provided to serve a subdivision or development unless otherwise approved by the District Engineer with concurrence by the Fire Marshal. When two means of access are required, one may be constructed to emergency access standards.
- 3.1.4 Streets or access adjacent to or necessary to serve the subdivision or development which are not within the boundaries of the subdivision or development shall be improved with development to standards required by the District Engineer to promote public safety and welfare.
- 3.1.5 All necessary right-of-way or easement acquisition outside the boundaries of a subdivision or development, including any agreements as to access, ownership and maintenance, shall be completed prior to District approval of a final map.
- 3.1.6 Unless otherwise required by an adopted street pattern or indicated as such on the master plan, streets shall not be located along property boundaries. Unless otherwise approved by the District Engineer, a proposed street lying along a boundary of a subdivision or development is to be dedicated and constructed full width to District standards. Half streets may not be permitted along property lines unless they are in accordance with an adopted street pattern and have been approved by the District Engineer.
- 3.1.7 Should half streets be permitted, they shall be distinctly designated upon the plans as being a portion only of street and not a street of full width. Whenever there already exists a dedicated and recorded half street adjoining a proposed subdivision or development, the other half must be dedicated with the proposed subdivision or development to make the street complete. When a half street is permitted along the boundary of a subdivision or development, it shall be improved half width, but in no instance shall the paved travel way be less than 24 feet in width (with no parking). Curb, gutter and sidewalk adjacent to the subdivision or development with a minimum 2-foot shoulder opposite shall be provided. Provisions for cut and/or fill slopes along the shoulder and any necessary sanitary sewer, storm drain or utility extensions, shall be provided and constructed to District standards. Whenever a one-half street is permitted, a 2"x 6" redwood header shall be placed along the open pavement edge, or add one-foot additional width to pavement for future saw cut.

- 3.1.8 Streets shall be extended to the subdivision/development boundary for future development when required by the District Engineer. Streets extending to the subdivision or development boundary which are proposed for future extension and exceed 150 feet in length or more than one lot in depth are to be provided with temporary cul-de-sacs to District standards. The future removal of such cul-de-sac and its replacement to full width District standard street improvements must be provided with the extension of the street by future development.
- 3.1.9 Street design shall conform to standard details and be based on the design subgrade resilience modulus shown in the soils report prepared by a Nevada registered Civil Engineer, submitted with the improvement drawings. All soils report recommendations are to be incorporated into the plans and borings to be shown on plans.
- 3.1.10 Street Patches: Street cuts are permitted only with the prior approval of the District. Street cuts will not be permitted in streets unless a permit is granted by the District. If street cuts are permitted, a permit from the District shall be obtained, all fees paid, and patches shall be constructed in conformance with the street cut policy and detail(s) in Appendix A.
- 3.1.11 The District shall encourage residential development design that ultimately minimizes vehicular speeds upon local streets, and incorporates traffic calming measures that are approved by the District where applicable and where deemed necessary by the District of the District's Engineer.

# 3.2 Design Requirements

- 3.2.1 All streets shall have a minimum grade of 0.4%. Commercial collector, arterial and expressway streets shall have a maximum grade of 6.0%. Residential collector and local streets shall have a maximum grade of 8.0%.
  - 3.2.1.1 Street intersections shall not be allowed when the grade on the primary street exceeds 6.0%.
  - 3.2.1.2 "Roller-coaster" and "Hidden-dip" patterns are not allowed on through streets.
  - 3.2.1.3 Sharp horizontal curvature shall not be introduced at or near the top of a pronounced crest vertical curve or near the bottom of a pronounced sag vertical curve.
- 3.2.2 Street grades on the minor legs of intersections shall not exceed 4% for a minimum distance of 50 feet measured from the extension of the face of curb of the primary street through the intersection.
  - 3.2.2.1 Street intersections of two local streets in a stop condition do not require a vertical curve at the intersection of the crown section with the street grade.
  - 3.2.2.2 Other street intersections shall require a vertical transition at the intersection of the crown section with the street grade.

NOTE: A local street is defined as having a maximum average daily traffic volume of 1,000 trips or, serving a maximum of 100 single-family lots.

- 3.2.3 Street Crown The normal street crown is 2.0% from the centerline to the lip of gutter, with a minimum of 1.0% and a maximum of 4% when approved by the District Engineer. Unless approved otherwise, the crown shall be at the centerline of the traveled way.
- 3.2.4 Vertical curves shall be provided wherever the algebraic difference between two intersecting grades is 2% or more, excluding intersections. Such curves shall be of sufficient length to provide the minimum sight and stopping distances as established by the American Association of State Highway and Transportation Officials (AASHTO), for minimum design speeds of 30 MPH for local and collector streets, 40 MPH for minor arterial streets and 50 MPH for major arterial and expressway streets.
- 3.2.5 Horizontal curve radii shall be determined using design speeds of 30 MPH for local and collector streets, 40 MPH for minor arterial streets and 50 MPH for major arterial and expressway streets. Arterial and expressway streets shall be designed using current AASHTO design criteria for "High-speed Urban Streets". Collector and local streets may be designed using current AASHTO design criteria for "Low-speed Urban Streets".

Horizontal curves on local streets serving 20 lots or less may be designed at 20 MPH and 50 lots or less at 25 MPH. (Lots shall include existing and those that may occur with future development.)

Unless specifically approved in a tentative map, planned development, or other public review, no local street in a residential district shall have a tangent length of greater than six hundred (600) feet, or the distance of twelve (12) lots on one side of the street, whichever is less, unless it can be demonstrated that the tangent is visually broken by a vertical curve, or that a longer tangent is necessary to preclude a traffic hazard. Local streets should not exceed 750 feet in length unless the street is curved (100 to 300-foot radius, depending upon the design speed), in which case the street may extend to <sup>1</sup>/<sub>4</sub> mile if the cut-through traffic potential is minimal.

Local streets shall be discontinuous, and generally should be interrupted with jogs, curves, and offsets. Four-way intersections should be avoided. Driveway access from single-family dwellings shall not be permitted on collector streets, which are anticipated to carry more than one thousand (1,000) average daily vehicle trips.

DESIGN SPEED V(mph)	friction factor Low Speed Urban Street Design	friction factor High Speed Urban Street Design	Minimum Stopping Sight Distance (feet)
20	0.30		150
25	0.25		150
30	0.22	0.16	200
40		0.15	325
50		0.14	475

The minimum design radius shall be determined using the following formula:

where, 
$$R_{min} = \frac{V^2}{15 (e+f)}$$

R - Centerline Radius of roadway.

e - Superelevation rate, decimal (For a normal crown section, e is assumed negative for adverse side). Maximum allowable superelevation shall be 4 percent.

f - Friction factor from above table.

- 3.2.6 Curves on any street, except local streets, shall be separated by a tangent of not less than one hundred (100) feet.
- 3.2.7 Any street or highway intersecting any other street or highway, shall intersect at an angle as near to a right angle as is practicable, but in no event shall an intersection be allowed at an angle of less than 60 degrees unless approved otherwise by the District Engineer.
- 3.2.8 Dead end streets exceeding 150 feet in length, when measured from the roadway right-ofway to the end of the street, shall be provided with a cul-de-sac.
- 3.2.9 Private streets shall be structurally designed to District standards for local streets, including horizontal and vertical alignment. Street lights, storm drain systems and sanitary sewer systems located within a private street shall be constructed to District standards. At the intersection with public streets, a standard size "regulatory sign" may be installed which says "PRIVATE STREET NOT MAINTAINED BY GRGID."
- 3.2.10 Private access serving more than one but less than five residential units shall be a minimum of 20 feet in width and be structurally designed and paved with a minimum of 2 and 1/2 inches of asphalt concrete pavement, compacted to 96 percent minimum density. Said asphalt concrete shall be placed over an engineered base and be provided with adequate roadway drainage.
- 3.2.11 Design of the structural section for Asphalt Concrete Pavement shall conform to the procedures as set forth in the current Asphalt Institute Manual Series No. 1 (MS-1), based on subgrade strength values determined by Resilient Modulus (MR) Value, Resistance (R) Value or California Bearing Ratio (CBR). Sufficient tests shall be made to evaluate fully each different soil type in the project. Asphalt Concrete Pavement mix shall be Type 2 unless otherwise approved by the District Engineer. Hydrated lime (mineral filler) shall be added to all plant mix bituminous aggregates at one and one-half percent of the weight of the dry aggregates, unless otherwise approved by the District Engineer. The minimum design life of the structural section shall be 20 years. In no case shall the structural section for asphalt concrete pavement for streets be less than 2 1/2 inches of pavement over 6" of type 2 class B aggregate base. All streets, both public and private, which are to be utilized by construction vehicles during development shall be designed to carry the maximum anticipated loads.
- 3.2.12 Fog Seal Private and Public Streets: Within a period of not more than 20 days after the asphalt concrete pavement has been placed, a seal coat (Fog Seal) of emulsified asphalt

Type SS-1h diluted with an equal amount of water shall be applied at the rate of 0.08 to 0.10 gallons per square yard. Fog seal shall not be placed when the temperature is below 50 degrees Fahrenheit or when weather conditions in the opinion of the District Engineer, would prevent proper construction.

- 3.2.13 Cul-de-sacs & Knuckles Minimum grades around Cul-de-sacs and Knuckle-type intersections shall be 0.4%. The normal street crown with such a development may be increased to a maximum of 4.0% from the centerline to the lip of gutter. Knuckle turnouts are not allowed on through streets, or local streets serving more than 20 lots, without prior approval by the District Engineer.
- 3.2.14 Cul-de-sacs Cul-de-sacs shall not exceed 400 feet in length when measure from the roadway right-of-way to the radius point of the bulb turnaround, unless provided with an emergency access to District standards. The minimum turnaround radius of the bulb shall be 40 feet measured from the radius point to face of curb. Minimum right-of-way for the bulb shall be 45 feet measured from the radius point to the right-of-way line.
- 3.2.15 Temporary cul-de-sacs shall be constructed with a minimum of 2 and 1/2 inches asphalt concrete pavement on an engineered base with asphalt curbing when located within the development. When located within an adjacent future developable area it shall conform to temporary emergency access road standards within an access easement. All temporary cul-de-sacs shall be a minimum 40-foot radius.
- 3.2.16 Emergency Access Roads Roadways are to be a minimum width of 20 feet structurally designed to support a tandem axle loading of 25 tons, with a minimum outside turning radius of 40 feet, unless otherwise approved by the Fire Marshal. Grades shall not exceed the maximum for street grades unless otherwise approved by the Fire Marshal and the District Engineer. Access to roadway at each entrance shall be controlled by an "Emergency Access Control Gate", and shall be posted "For Emergency Vehicles Only".
  - 3.2.16.1 Temporary emergency access roads shall be surfaced with a minimum of 2 and 1/2 inches of Type 2, Class B Aggregate Base applied with a minimum of 0.08 gallon per square yard of asphalt seal coat and be provided with adequate roadside drainage.
  - 3.2.16.2 Permanent emergency access roads shall be paved with a minimum of 2 and 1/2 inches of asphalt concrete pavement on an engineered base and are to be provided with adequate roadside drainage.
- 3.2.17 Improved Maintenance Access Vehicular access for maintenance of District owned water, sanitary sewer and storm drain facilities and their related appurtenances are to be constructed to a minimum width of 12 feet, structurally designed to support a tandem axle loading of 10 tons, with adequate roadside drainage, and are not to exceed 12% in grade.
  - 3.2.17.1 Temporary maintenance access roads shall be surfaced with a minimum of 2 and 1/2 inches of Type 2, Class "B" aggregate base, and be provided with adequate roadside drainage.
  - 3.2.17.2 Permanent maintenance access roads shall be paved with a minimum of 2 and 1/2 inches of asphalt concrete pavement on an engineered base and be provided with adequate roadside drainage.

- 3.2.18 Retaining Walls: Unless using District standard details, all retaining walls constructed within the public R.O.W. and those which are to be maintained by the District shall have a complete set of design calculations submitted with the improvement plans for review. All calculations shall be signed and sealed by a Nevada Registered Civil Engineer. An anti-graffiti treatment shall be incorporated on all masonry or concrete retaining walls.
- 3.2.19 Street signs to District standards shall be installed at all intersections. Signage and pavement markings shall be installed on all public streets and bikeways either newly constructed or improved with development, as required by the District Engineer. Posted speeds on District streets shall be 25 MPH on local and collector streets, 35 MPH on minor arterial streets and 45 MPH on major arterial streets, unless designated otherwise by the District Engineer. Proposed signage layouts shall be submitted with public improvement plans. Signs and pavement markings shall be in conformity with the most recent addition of the manual on uniform traffic control devices (MUTCD), published by the Federal Highway Administration.
- 3.2.20 High-hazard locations along streets shall be mitigated by the use of appropriate protective devices approved by the District Engineer. Street right-of-way and width widening shall be provided where necessary for the installation of such protective devices.

### 3.3 Sidewalks, Curb and Gutters, Driveway Approaches, Curb Cuts, Alleys and Bikeways

- 3.3.1 Sidewalks, curbs and gutters shall be installed or existing improvements replaced when deteriorated or displaced, including paving between street cut and gutter line on all streets. In no instance, shall sidewalks be less than 4 feet in width. In commercial areas sidewalks shall not be less than 5 feet in width.
- 3.3.2 Unused driveway aprons or approaches shall be removed and replaced with new curb, gutter and sidewalk. Driveway aprons or approaches shall only be designated for use if there is a clear unobstructed all weather surface provided to the property and an access gate is provided when a fence is proposed.
- 3.3.3 Design and construction for driveway, approaches and curb cuts shall be in accordance with District standards.
- 3.3.4 Curb returns shall be provided with "Pedestrian Ramps for the Handicapped" in accordance with District standards.
- 3.3.5 Curbs and gutters are to be constructed of Portland Cement Concrete unless approved otherwise by the District Engineer. Curb and gutter shall be Type 1. Type 2 Curb and Gutter (rolled curb and gutter) will not be allowed.
- 3.3.6 At each right angle street intersection, the property line at each block corner shall be rounded with a curve having a radius of not less than 15 feet on local streets, 20 feet on collector streets, 23 feet on minor arterial streets and 33 feet on major arterial and expressway streets. Where streets intersect at angles of less than right angles or where other peculiar conditions of intersection occur, the District Engineer may require a different

radius.

- 3.3.7 Curb returns shall have minimum face of curb radii of 20 feet on local streets, 25 feet on collector streets, 30 feet on minor arterial streets and 40 feet on major arterial and expressway streets.
- 3.3.8 Commercial Driveways: Spacing from center to center shall be a minimum of 235 feet on major arterials, 150 feet on minor arterials and 50 feet on commercial collectors.
- 3.3.9 The design of bikeways shall conform to the AASHTO "Guide for Development of New Bicycle Facilities", latest edition, unless otherwise specified by district ordinance, Standard Specifications and the Details for Public Works Construction, or items in this section.
- 3.3.10 Public and Private Bicycle and Pedestrian Paths: The structural section for these facilities shall be based on a soils report recommendation. The minimum structural section shall be 2 1/2 inches of Type II or Type III asphalt concrete pavement compacted to 95% minimum density over 2 inches of Type 2 Class B aggregate base.
- 3.3.11 No obstruction, i.e. power poles, street lights, signal poles and controls, water meter boxes, pull boxes, mail boxes, etc., shall be allowed to be located within sidewalks or pedestrian ways, except as may be allowed by the District Engineer where obstructions exist within existing improvements. Any necessary additional right-of-way that may be required for locating such facilities at the back of sidewalks shall be dedicated or easements provided.
- 3.3.12 Cut and fill slopes are to be set back a minimum of 1 foot from the back of the sidewalk. If no sidewalk exists the setback shall be a minimum of 5 feet from back of curb.
- 3.3.13 Where car storage or access for motor vehicles is desired in business, commercial, or industrial districts, provision shall be made for a driveway. All driveway approaches shall enter properties via a standard curb cut.
- 3.3.14 Alleys Longitudinal grades shall conform to standards for streets, with a cross slope of 2.0% minimum from the property line toward the center of the alley.
- 3.3.15 Policy

The following policy establishes that, pursuant to NRS 278.02313(d), owners of property in the District will be responsible for the repair and/or reconstruction of a sidewalk in the public right-of-way that abuts the property of the owner if the property owner caused the need for such repair and/or reconstruction. Owners of property in the District will also be responsible for the general maintenance of a sidewalk in the public right-of-way that abuts the property of the owner, without limitation, sweeping, removal of snow, ice and weeds, and maintenance of any grass, shrubs or trees that encroach on the sidewalk. Further, the policy will attempt to abate vehicle owners from parking on the sidewalk, and prematurely damaging the sidewalks in the District.

- 3.3.15.1 Findings
  - a. Property owners abutting sidewalks have allowed snow and/or ice to accumulate, or have allowed weeds, grass, shrubs, trees, branches,

and other foliage to grow onto, over and around portions of the sidewalk. Further, vehicle owners are parking their vehicles on the sidewalk. These natural and unnatural obstructions are nuisances by effectively obstructing pedestrian and bicycle traffic, and cause premature wear, tear, and damage to the sidewalks throughout the District.

- b. District policy involves notification to the property owner where such snow and/or ice have accumulated, or where weeds, grass, shrubs, trees, branches, and/or other foliage have been determined to have grown onto, over or around portions of the abutting sidewalk, to include requesting that the property owner remove the snow and/or ice, and to include requesting that the property owner trim and/or remove the weeds, grass, shrubs, trees, branches, and/or other foliage, at the expense of the real property owner, if necessary.
- c. Further, the District will notify vehicle owners that parking on any part of a sidewalk in the District constitutes a nuisance when the District is made aware of the vehicle(s) parked on a District sidewalk. Failure to abate this nuisance will result in the District notifying the Douglas County Sheriff's office and requesting enforcement of NRS 484B.450(1), which prohibits parking of vehicles on the District's sidewalks. Such enforcement may include citation, and/or towing of the vehicle at the expense of the vehicle owner.
- d. GRGID will notify property owners if a sidewalk in the public right-ofway abutting the property of the owner requires repair and/or reconstruction, if it is determined by District officials that the property owner caused the need for such repair and/or reconstruction.

# 3.3.15.2 Notice

- The District, upon a determination by District officials, or on а. complaint by any resident that snow and/or ice, or weeds, grass, shrubs, trees, branches, and/or other foliage are obstructing a sidewalk abutting property in the District, declares that such obstruction(s) constitute(s) a nuisance. The District will cause to be issued a Notice to Abate to the property owner where the offending snow and/or ice, or weeds, grass, shrubs, trees, branches, and other foliage are located. The Notice will give the property owner fifteen (15) days to remove the snow and/or ice, and/or to abate, trim, and/or remove the offending weeds, grass, shrubs, trees, branches, and/or other foliage. Additionally, the property owner will be expressly notified, in bold print, that failure to address the matter will result in the District removing, abating, and/or trimming the obstruction at the expense of the real property owner. Service of a Notice to Abate will be by certified U.S. mail, or personal service.
- b. When the District is notified that a vehicle owner has parked his/her vehicle on any part of a sidewalk, the owner will be notified in writing

by the District that the parking of the vehicle on any part of the sidewalk constitutes a nuisance and a violation of NRS 484B.450. A first-time violator will be issued a warning.

- c. Subsequent (two or more) violations will result in the District notifying the Douglas County Sheriff's Office to enforce NRS 484B.450, and request issuance of a citation to the vehicle owner, and/or towing the vehicle at the vehicle owner's expense. Any service of a Notice will be certified U.S. mail, or by personal service.
- d. The District, upon a determination by District officials, or on complaint by any resident, that a sidewalk in the public right-of-way abutting property in the District is in need of repair and/or reconstruction, and that the property owner caused such need for repair and/or reconstruction, declares that such condition(s) constitute(s) a nuisance. The District will cause to be issued a Notice to Abate to the property owner who has caused such need for repair and/or reconstruction of the sidewalk. The Notice will give the property owner thirty (30) days to repair and/or reconstruct the portion of the sidewalk in need of repair and/or reconstruction. Additionally, the property owner will be expressly notified, in bold print, that failure to address the matter will result in the District repairing or reconstructing the sidewalk at the expense of the real property owner. Service of a Notice to Abate will be by certified U.S. mail, or personal service.

# 3.3.15.3 Enforcement

- a. If snow and/or ice, or weeds, grass, shrubs, trees, branches, and other foliage is/are not abated within the 15-day notice period, the District will remove the snow and/or ice, and/or abate, trim, and/or remove the offending weeds, grass, shrubs, trees, branches, and/or other foliage at the expense of the property owner. The property owner will have thirty (30) days after receipt of the billing statement to submit payment to the district.
- b. If a sidewalk in the public right-of-way abutting property in the District is in need of repair and/or reconstruction, and the owner of the property abutting the sidewalk caused the need for such repair and/or reconstruction, and the property owner does not repair and/or reconstruct the portion of the sidewalk in need of such repair and/or reconstruction within the 30 day notice period, the District will repair and/or reconstruct the sidewalk at the expense of the property owner.
- c. Any unpaid sum of money against the property or owner accrued in abating or removing nuisances shall be a claim against the property, and may be recovered in an action at law in any court of competent jurisdiction, pursuant to NRS 405.230 or NRS 318.197, or pursuant to both statutes.

d. The vehicle owner shall bear the cost of any and all citations and/or towing expenses.

#### 3.4 Speed Mitigation Measures

The following policy establishes the type and the priority of GRGID actions to mitigate speeding problem areas within the Gardnerville Ranchos. The following priority system is designed to maximize the benefits of mitigating speed, while minimizing the expense to GRGID members.

The rationale of the priority system is to implement the highest priority measure, as appropriate, for an initial response to a speeding problem. If a speeding problem persists, the next appropriate measure is designed to be implemented. It is believed that most speeding problems will be resolved by implementing the first few tiers of the mitigation measures.

It is recommended that priority measures Numbers 5 and 7 should not be implemented unless a traffic

assessment is performed to demonstrate that the measure is warranted.

3.4.1		Speed Mitigation Priorities - The speed mitigation iorities are established with the No. 1 measure being the top priority, or e first measure to be implemented in response to a speeding problem.
3.4.	wa pe ca Gi sig	farning and Caution Signs. Warning and cautions signs are utilized to arn drivers of unique or unsafe conditions. Certain parking practices, edestrian activity, or limited sight distance are situations where a aution sign is appropriate to warn a driver to travel at a safe speed. enerally, signs such as <i>"Slow"</i> ," <i>Slow Children at Play</i> ", or <i>"No Outlet"</i> gns are installed in an attempt to compel drivers to travel at lower peeds.
	id av th	his measure is considered to be used as a first response measure to entify areas that have unique characteristics that drivers should be vare of. It is recommended that signs be installed in conformance to e <i>Manual On Uniform Traffic Control Devices</i> ' (MUTCD) requirements and guidelines.
3.4.	th	beed Limit Signs. Speed limit signs are beneficial to remind drivers of e legal speed limit for a street. Speed limit signs are "regulatory signs", at is, the signs are legally enforceable by law enforcement personnel.
	pc lin sp Th als	evada Law is clear as to the speed limit in residential areas that are not osted25 miles per hour. However, there are often a variety of speed nits in, or near, residential areas. In an effort to avoid any confusion, oeed limit signs are proposed to be placed at the entrance of streets. his measure not only will remind drivers of the speed limit, but it will so assist law enforcement personnel to effectively control speeding. It recommended that speed limit signs be installed in conformance with

MUTCD guidelines.

3.4.1.3 Speed Enforcement. Speed enforcement is generally perceived to be the primary control to rectify speed concerns. Speed enforcement can be effective in problem areas. Unfortunately, speeding often resumes when a patrol officer leaves a site. It is important to realize that enforcement activities cannot be conducted on a 24 hour-a-day basis for local streets.

If this mitigation measure is implemented, in conjunction with the two

mitigation measures above, driver awareness to speeding will be

significantly enhanced.

3.4.1.4 Neighborhood Speed Watch Program. This program consists of a cooperative effort among neighborhoods and the Sheriff's Department. Residents of a neighborhood monitor and report speeders in accordance with guidelines established by the Sheriff's Department. The Sheriff's Department will notify the speeding driver, generally with a warning on the first offense. Persistent speeders will generally receive escalated enforcement actions.

This activity is beneficial in that it gives the local residents an opportunity to constructively resolve speeding problems that they observe. Further, the program provides direct assistance to law enforcement personnel.

3.4.1.5 Pavement Striping and Markings. Pavement markings provide a supplemental means to clearly notify drivers of an appropriate driving speed. Generally, pavement markings, in conjunction with signage, are effective in attracting the attention of the driver as a reminder that a slower speed is necessary when driving through an identified area.

Despite the effectiveness of pavement markings (under favorable weather conditions), marking deteriorate over a short period of time. Generally seasonal or annual maintenance is required to assure that the marking have adequate visibility characteristics. Due to the cost in both time and financial resources, pavement markings receive a lower priority for implementation. Higher priority measures should be encouraged to minimize the maintenance responsibilities associated with pavement markings.

3.4.1.6 Speed Alert. The speed alert is a radar detector that displays the driver's speed. Drivers become aware of the speed they are traveling and have a tendency to reduce their speed to the posted speed limit. Currently, GRGID has limited access to the speed alert equipment owned by Douglas County.

In the event that speed alert equipment can be acquired by GRGID through a grant, it can be a very visible and effective means of making the driver aware of the speed that he is traveling. When the speed alert is used in conjunction with law enforcement actions, drivers have a greater tendency to travel at appropriate speeds.

3.4.1.7 Speed Humps and Dips. If a driver is forced to make a significant sideto-side or up-and-down movement, it is believed that almost everyone slows down. The vertical movement produced by a speed hump or dip is reported in several traffic studies to produce a reduction in speed.

Speed humps and dips are designed to produce a vertical shift in the travel pattern, which does not have a significant affect on rideability at appropriate speeds. However, at higher speeds, the speed hump will imitate hitting a large bump in the road. Speed humps, and the associated signage and pavement markings, are expensive to install and maintain. This measure is recommended to be used in the GRGID street system as a last resort to a speeding problem. Speed humps and dips should not be used on arterial and collector streets, because they can have an adverse impact on the response capabilities for emergency vehicles.

# 3.5 Traffic Calming Measures

A primary goal of the District is "to attain the highest quality of life possible for each resident". Accordingly, this policy defines the proper use of traffic calming alternatives on residential streets and the procedure required to implement a mitigation measure.

Residents concerned about speeding frequently request stop signs. However, the Federal Highway Administration developed warrants for the Manual on Uniform Traffic Control Devices (MUTCD) regarding stop signs. Studies show unwarranted stop signs cause accidents they are designed to prevent, breed contempt for other necessary stop signs, are responsible for millions of gallons of wasted fuel annually, create added noise and air pollution, and increase rather than decrease speeds between intersections. As a result, the District does not install stop signs for speed control purposes.

The purpose of this policy is to establish a procedure, which the District and its Staff will follow when members of the public request that a specific speeding issue be addressed.

- 3.5.1 Request and Approval Procedure
  - a. A Petition for traffic calming (forms provided by the District), with signatures from at least 2/3 of the residents with addresses on the street where the traffic calming is desired shall be submitted to the District.
  - b. The District shall receive complete petitions each year between July 1<sup>st</sup> and September 1<sup>st</sup>. The District's Staff will conduct a seven-day speed survey and oneday traffic count for each of the streets between September 15<sup>th</sup> and November 1<sup>st</sup>. The District's Staff will review and rank the petitions and prepare recommendations to its Board of Trustees (January Board meeting) based on Staff's findings,

prioritization, and available funding.

- c. Staff's recommendation to the Board will clearly define the recommended calming measure, construction cost, and estimated schedule for completion. Where appropriate, the District shall try to include the calming measure construction within the District's annual street maintenance project.
- d. Upon receipt and verification of the petition, Staff will gather the traffic data necessary to determine if the traffic calming meets the warrants specified within the MUTCD.
- e. The District will prioritize qualified streets for funding based on the ranking system described below. If residents wish to fund the traffic-claiming alternative, they must submit full payment on estimated cost before the District advertises the project for bid.
- f. The District's Staff shall obtain Fire Department approval of the traffic-calming device in writing prior to preparing a recommendation to the District's Board.
- g. The District's approved traffic calming measures are detailed within Appendix H.
- 3.5.2 Evaluation and Prioritization
  - a. Basic Criteria
    - i. The street of interest shall be limited to streets classified as a minor collector or local street.
    - ii. 2/3 of the street frontage shall be residential, park, and/or school.
    - iii. The posted speed limit is 30mph or less.
    - iv. The longitudinal grade of the street does not adversely affect the motorist in going through the traffic-calming device.
  - b. Operational Criteria
    - i. The street of interest shall be at least 1,000 feet long between all-way stop or traffic-controlled intersections.
    - ii. A minimum 85<sup>th</sup> percentile speeds are 22mph on a 15mph street, 32mph on a 25mph street and 37mph on a 30mph street as determined by the District by investigations made after the petition is received.
    - iii. The average daily traffic (ADT) on the street of interest shall be 4,000 vehicles a day or less.
  - c. Priority ranking will be done annually on all petitions received (including a maximum of two previous years of petitions) using a point system. Streets under consideration will be investigated and data accumulated by the District. The data collection will include a traffic count, speed survey, and measurement of street frontage by houses, schools, parks, playgrounds, or multi-family dwellings.

- d. Points will be awarded in the following manner:
  - i. One point for every 50 vehicles traveling the street in a 24-hour study period.
  - ii. One point for each percentage point of traffic exceeding the posted speed limit and one-half point for each mile per hour speed differential between the posted speed limit and the 85<sup>th</sup> percentile speed.
  - iii. Two points for every residential unit fronting the street.
  - iv. One point for each 50 feet of school, park, playground, or apartment frontage.
- 3.5.3 Location Guidelines
  - a. Any traffic calming treatment shall be visible to oncoming traffic for at least the minimum safe stopping sight distance based on the 85<sup>th</sup> percentile speed.
  - b. Traffic calming shall take into account existing drainage features and bicycle facilities.
  - c. Where possible, devices shall be located to minimize impacts to on-street parking.
  - d. The traffic calming devises shall be placed near streetlights where feasible.
  - e. Related signage shall be placed in accordance with the District standards or MUTCD standards.
  - f. Diverters shall not be installed where traffic is likely to be rerouted to other residential streets.

#### 3.6 Snow Removal

The District Manager is authorized, in his discretion, to cause snow removal activities to be undertaken. The District Manager may engage the services of an independent contractor to remove snow from the District's streets, and he may utilize District staff and equipment to assist in snow removal.

3.6.1 Snow Removal Factors

The District Manager may consider any or all of the following factors in authorizing, in his discretion, snow removal from the District's streets. Those factors are:

- a. A minimum of six (6) inches of accumulation.
- b. Continued snowfall.
- c. Weather forecast calling for continued accumulations.
- d. The weather forecast of the duration of snowfall and forecasted depth of further snow

accumulations.

3.6.2 Additional Factors

The District Manager may, in his discretion, when he determines that all of the factors set forth in Section 3.6.1 above are present, initiate one or more (or all) of the following activities:

- a. Authorize the District's independent contractor to start plowing the main roads of the District in the first instance, and the side roads of the District once the main roads are clear.
- b. During daytime hours, employ District crews and equipment to plow and/or sand identified trouble spots.
- c. If the weather forecast anticipates large accumulations, the District Manager may instruct the District's independent contractor and District crews to continue plowing and sanding efforts for the duration of the storm event.
- 3.6.3 Use of District Personnel

The District Manager may, in his discretion, divert personnel employed by the District from normal work efforts to snow plowing and sanding activities. The District Manager may consider authorizing District personnel to work overtime hours in situations where additional plowing and sanding is required. The District Manager may consider the availability of crews, the cost of overtime hours, and the additional factors set forth in this Policy in his determination to utilize District personnel in overtime snow plowing and sanding activities.

This policy is, by virtue of the District's past experiences, somewhat nebulous, and is definitely general. It vests the District Manager with broad discretion, as it is intended to do. As stated above, pinpointing a precise policy as to when to plow and/or sand, how much, accumulations of snow requiring further effort, and all other considerations, which are taken into account prior to authorizing snow removal, are difficult at best to state.

#### 3.7 Weed Spraying Policy

The primary function of this policy is to provide for the safe and effective control of identified weeds within the boundaries of the Gardnerville Ranchos General Improvement District (GRGID).

It shall be the policy of GRGID to inspect for identified weeds within GRGID's rights of way, parks, trail systems, open spaces, and detention/retention ponds.

After inspection, GRGID will formulate a plan for the management of the weeds by using methods which include a pesticide (herbicide) component, used in a manner that will eliminate weeds and not result in adverse human health effects and/or environmental impacts.

At the beginning of each spray season, a certified staff member will ascertain that all equipment is in proper working order prior to applying pesticides. After all equipment is deemed operational, the staff member will calibrate the machine setting the machine at the proper pressure (40 psi is the proper setting for the sprayer now in use and which is the standard for the weed spraying procedure within GRGID) and output setting.

It is also GRGID's desire to minimize drift by assuring that pesticides (herbicides) will not be applied when wind speeds exceed 10 miles per hour and/or the wind is blowing in the direction of a sensitive area located nearer than 150 feet. A sensitive area is defined as an institution, such as a school, a residence, or health care facility. A sensitive area would also include a natural area, such as a water body (not a detention or retention basin), or landscape/garden plot that includes desirable vegetation. Staff members will seek recommendations from chemical company representatives for the selection of spray equipment (including spray nozzles) and a drift retardant to be mixed with the pesticide(s) prior to application. All pesticides will be applied in strict accordance with label directions.

Prior to each application, a proactive approach will be taken to prevent incidents. When sensitive areas are identified, responsible persons should be notified as needed to prevent health or environmental effects. When complaints are received, they should be referred promptly to the GRGID Manager for follow-up.

The certified staff member who will be responsible for spraying pesticide will keep a daily log of times sprayed, locations, chemical used, amount of chemicals used, wind speed and direction.

After each day of spraying, the staff member will be responsible for cleaning equipment and properly disposing and/or storing the remainder of chemical not used.

# 4.0 STORM DRAINAGE

## 4.1 General

- 4.1.1 With the following applications, all subdividers or developers shall submit for approval, unless waived by the District Engineer, a drainage report signed and stamped by a Nevada Registered Civil Engineer in accordance with District standards. The drainage report shall be based on current zoning or Master Plan whichever process produces the greater runoff. All costs of the District for drainage evaluation shall be reimbursed to the District by the developer.
  - a. Subdivision Improvement Plans
  - b. Where development is in a critical drainage area

c. Where the development includes coverage of 10,000 or more square feet of impervious surface within the property

- d. Where the development involves 20,000 or more square feet of grading
- 4.1.2 Whenever a drainage report indicates that the 25 year, 24 hour, storm runoff (or a 25 year peak discharge, whichever is greater) from a development cannot be handled by the existing storm drain system, the developer is to upgrade the existing system to accommodate the runoff; or provide on-site detention and controls for acceptable disbursement into the system; or provide an on-site retention-infiltration system verified by the engineer to be adequate to accommodate the runoff. The operation and maintenance of an on-site retention-infiltration systems are not acceptable for District-owned storm drain systems or when runoff from more than one parcel is to be accommodated.
- 4.1.3 Discharge of storm drain waters into a major drainage facility or natural water course is not to be a contributing factor insofar as increasing the peak flow of storm drainage runoff in said drainage facility above that which exists at present; or the engineer is to provide to the District conclusive proof in the drainage report that any increase in peak flow will not adversely affect or cause damage to any property along said drainage facility or water course now or in the future, based on existing zoning or the master plan and elements thereof, whichever is more restrictive.
- 4.1.4 Development of property shall not adversely affect any natural major drainage facility or natural water course. Natural facilities shall remain in as near a natural state as is practicable, with any modification proposed, including any erosion mitigating measures, addressed in the drainage report and drainage plan. When the flows, velocity, or side slope as determined by the Drainage Report indicates a hazard to life or limb, fencing, in accordance with District standards, shall be provided.
- 4.1.5 All drainage relating to a subdivision or development shall be collected on site by facilities to accommodate the storm drain waters for the 25 year, 24 hour (or a 25 year peak discharge, whichever is greater) return frequency storm flow, both entering the site and generated on-site and piped in accordance with District standards to an existing adequate

public storm drain system, major drainage facility or natural watercourse. Where the District Engineer determines that piping storm drain waters is not in the interest of the District, alternative methods of transporting such waters may be approved in lieu of piping. Such storm drain waters generated within the boundaries of a subdivision or development which discharge from a public drain system onto and across private property require that a permanent easement for access and maintenance be granted the District from the subdivision or development boundary to the point of discharge into an existing public storm drain system, major drainage facility or natural water course. Improvements to District standards will be required to assure access and proper maintenance within said easement.

- 4.1.6 In general, storm runoff from a project site shall be detained or retained on-site such that the post development peak runoff leaving the site will not exceed predevelopment peak runoff leaving the site. Stormwater shall be treated on-site to the satisfaction of the District in order to mitigate adverse water quality impacts which may be caused by the project.
- 4.1.7 All State laws and County ordinances shall be complied with.
- 4.1.8 Should the project be in a regulatory flood hazard zone, all improvements shall be designed to convey the 100-year, 24 hour, storm event and meet FEMA standards for flood proofing. If a project site is in a regulatory flood hazard zone, this shall be noted and the flood area hazard shall be shown on the project improvement plans.
- 4.1.9 Drainage facilities shall be designed with consideration of the impacts due to sediment, aggregation, scour, and debris on operation and maintenance of the facilities.
- 4.1.10 Drainage improvements shall be designed and constructed in conformance with the Douglas County Standards & Details for Public Works Construction (1992 Edition).

# 4.2 Drainage Report

The following criteria shall be considered for a required Drainage Report.

- 4.2.1 Standards for Drainage Report (Public and Private) The report is required to identify problems and present solutions with engineering documentation. Tabularized data on maps is preferred to lengthy written descriptions except for unusual items such as detention, HEC items, etc.
  - 4.2.1.1 Title Page
    - a. Project Name
    - b. Preparer's Name, Firm, Date
      - b. Professional Engineer's Stamp of Preparer and Signature
  - 4.2.1.2 Introduction
    - a. Site Location

- i. Street Location, Assessor's Parcel Number(s), and Section Reference
- ii. Adjacent Developments
- b. Site Description
  - i. Topography, Ground Cover, etc.
  - ii. Existing drainage facilities, major drainage facilities, flood hazard areas, irrigation ditches, other site conditions that must be considered.
- c. Proposed Project Description
- d. Other previous studies relevant to site.
- 4.2.1.3 Historic Drainage System (discuss the following)
  - a. Major Basins
    - i. Relationship to major drainage facilities
    - ii. Major basin drainage characteristics (topography, runoff, cover, use, erosion, etc.)
  - b. Sub-basin and Site Drainage (1 and 2 may be tabulated on map)
    - i Minor (25 year, 24 hour, storm or a 25 year peak discharge, whichever is greater) and Major (100 year, 24 hour) storm flows for each sub-basin affecting the site.
    - ii. Existing drainage patterns; channelized or overland flow, point of discharge, etc.
    - iii. Effect of historic flows on adjacent properties.
- 4.2.1.4 Proposed (Developed) Drainage System (discuss each of the following)
  - a. Criteria
    - i. Size of major basins and tributary sub-basins
    - ii. Hydrologic method to be used for analysis (Rational or SCS)
    - Design Storm Intensities (Minor 25 year, 24 hour, storm or a 25 year peak discharge, whichever is greater; Major 100 year, 24 hour)

- iv. Rainfall design criteria for drainage calculations shall use the following unless otherwise approved by the District Engineer:
  - 1. Carson City IDF Curves
  - 2. NOAA Atlas
  - 3. SCS Type II Distribution
- b. Runoff
  - i. Historic storm flow rates and paths
  - ii. Developed storm flow rates and paths for minor and major storms
- c. Piping
  - i. Design the storm drain system to pass the 25 year storm including all downstream improvements
  - ii. Verify storm flows from inlets to ultimate outlets of the drainage system
- d. Detention (25 to 100 year storm(s) depending on conditions) (Required for any and all storms based on limiting conditions downstream. For example, if the piped system cannot pass the 25 year, the 25 year shall be detained; in addition, if the overland flow or channels cannot pass storms exceeding the 25 year (up to the 100 year) detention for all storms exceeding that capacity shall be provided)
  - i. Volume required and provided for zero increase in peak flows
  - ii. Release rates and method
  - iii. Staged storage routing analysis
  - iv. Passage of storms exceeding the 25 year up to the 100 year
  - v. Provide for an emergency overflow which will not cause a direct impact to neighboring sites
  - vi. Engineer to provide detailed description of downstream constraints (or none) and design calculations on how to mitigate the problem
  - vii. Need for detention shall be clearly identified in the <u>preliminary</u> or <u>schematic</u> plan and the necessary area shall be identified on preliminary plans

- e. Streets (May be shown on plans)
  - i. Depth and velocity of flow for major and minor storms
  - ii. Drainage system
- f. Open Channel Flow (May be shown on plans)
  - i. Type
  - ii. Depth and Velocity
- g. Storm Drains and Culverts (show all data on plans)
- 4.2.1.5 Areas Within Flood Hazard Zone When Applicable
  - a. Impacts
  - b. Protection
  - c. Compliance with Federal Emergency Management Administration requirements and Douglas County floodplain ordinances.
- 4.2.1.6 Conclusions: Discuss impact of improvements
  - a. Benefits
  - b. Adverse effects with solution to mitigate impact to them.

# 4.2.1.7 Appendixes

- a. Hydrologic and Hydraulic Computations
  - i. Historic Runoff
    - 1. Offsite
    - 2. Onsite
  - ii. Developed Runoff
    - 1. Offsite
    - 2. Onsite
  - iii. Detention for up to the 100-year storm
  - iv. Hydraulic Computations
    - 1. Hydraulic Grade Line (HGL) Minor Storm

- 2. Hydraulic Grade Line (HGL) Major Storm
- b. Drainage Plan
  - i. Site Location Map. On a U.S.G.S. map or larger as appropriate show relation of site to major drainage basin and sub-basin. show flood hazard areas if applicable and off-site flows through project.
  - ii. Site Drainage Plan
    - 1. Show the existing and proposed contours at least 100 feet beyond property line.
    - 2. The site drainage plan should be at the same scale as the grading plan. Show all sub-drainage areas per catch basin or channel and tabulate existing and proposed drainage showing time of concentration, average rainfall intensity, area, runoff coefficient, and peak flows for 25 and 100 year storms.
    - 3. All inlets and manholes shall be labeled to correspond to tabular numbering system. Pipe sizes, grades, velocities, peak flows and hydraulic grade lines shall be shown for all parts of the system in a tabular form either on the plans or in accompanying calculations.
    - 4. Both location plan (overall drainage) and site drainage plan shall be signed and sealed by a Nevada Registered Civil Engineer. The site drainage plan shall be included in the construction plans for the subdivision/development.
    - 5. On grading plans show peak flows for 25 and 100 year storms at inlets and other sub-basin points of concentration and at discharge points and in channels. Show peak flows entering and leaving the site, trace path leaving site to nearest major drainage facility without adverse impact to downstream owners.
    - 6. On plan and profile sheets, show peak flows for 25 and 100 year storms at all inlets as per above and in pipes show 25 year peak flows, velocities, and hydraulic grade line if above top of pipe.
  - iii. Benchmarks to be shown on plans with description and elevation
  - iv. Existing and proposed property lines

- v. Existing and proposed drainage easements
- vi. Street names, grades, and widths
- vii. Routing and accumulative flows at the upstream and downstream ends of the site and at various critical points onsite for both minor and major runoff. Inflow and outflow for both storms for all sub-basins.
- viii. Existing and proposed major drainage facilities
- ix. Open channel flow in major channels shall be provided with the following information on plans:
  - 1. Channel and Hydraulic Grade Line (HGL) profiles
  - 2. Cross sections and required right-of-way at 100 foot intervals
  - 3. Location and size of all existing and proposed structures
  - 4. Channel section and lining details
- x. Storm Sewers (Show on plans)
  - 1. Hydraulic Grade Line (HGL) profiles
  - 2. Location and size of all existing and proposed structures
  - 3. Proposed materials
  - 4. Pertinent elevations and slopes

# 4.3 Design Requirements (Public and Private)

4.3.1 Mannings Formula is to be used in computing capacities of all open channels and closed conduits with the following minimum values for roughness coefficient "n":

PVC or ABS	0.013
Concrete Pipe	0.014
Corrugated Metal Pipe (100% paved)	0.015
Corrugated Metal Pipe (paved invert)	0.019
Corrugated Metal (plain)	0.024
Open channels with gunite lining	0.019
Open channels with paved bottom	0.025

Earth channels (no rock or gravel)\_\_\_\_\_\_0.030 Rock or gravel per approved Engineers Manual based on size and placement of materials.

- 4.3.2 The Rational Method may be used in computations for the rate of runoff for urban and small watersheds 160 acres or less. The SCS method, HEC-1, and SCS TR-55 "Urban Hydrology for Small Watersheds", may be used for larger watersheds, or in lieu of the Rational Method on small watersheds.
- 4.3.3 The Rational Method
  - a. The design flow for the Rational Method is expressed as:

Q = CiA,

where:

Q = peak rate of runoff, cubic feet per second

C = runoff coefficient

i = average rainfall intensity, inches per hour

A = watershed area, acres

b. The following listed runoff coefficients, depending on future use, shall be used:

NOTE: A "build up" C value may be required in special conditions such as very small lots with large houses or duplexes.

### RUNOFF COEFFICIENTS "C"

Land Use Type	Runoff Coefficient "C"
Rural	
Single Family Residential	0.45-0.60
Multi-Residential	
Neighborhood Commercial	0.85
Office	0.95
Public Facility	0.50-0.85
Pavement and Concrete Surfaces	0.90-0.95
Park	0.25
Open Space (0-5% grade - vegetated)	0.20-0.30
Open Space (0-5% grade - no vegetation)	
Open Space (5-15% grade - vegetated or	
unvegetated)	

c. The rainfall intensity curve shall be used for determining the average intensity. The time of concentration, with a minimum build up time of 10 minutes is expressed as:

#### where:

tc<sub>1</sub> = time of concentration at initial inlet, minutes

L = length from uppermost point of watershed inlet, feet

V = channel or overland velocity, feet per second

Given the time of concentration at a design point, the time of concentration at the next design point is determined by adding travel time, expressed as:

t = LV x 60

where:

t = travel time, minutes

L = length of channel or conduit between design points, feet

V = channel or conduit velocity, feet per second

- 4.3.4 Minimum design velocity shall be 3 feet per second for closed conduits. Maximum design velocity shall not exceed the erosion resisting capabilities of the conduit and storm drain system.
- 4.3.5 Overland flow is to be provided for and channelized to District standards within dedicated easements or public right-of-way to protect structures from flood during periods of rainfall-intensity storms that exceed the 25 year storm, up to and including the 100 year return frequency storm.
- 4.3.6 Easements with improved vehicular access in accordance with District standards shall be provided to publicly owned storm drain manholes, storm drain inlets and outlets and to associated structures not located within an improved street section.
- 4.3.7 Easements for access to and maintenance of the 100 year storm floodway associated with a major drainage facility or natural water course are to be provided to the District. Improved vehicular access in accordance with District standards shall be provided when determined necessary by the District Engineer.
- 4.3.8 Surface drainage from any developed area shall not cross any property line except by way of a natural watercourse, major drainage facility, an approved drainage system within a public storm drain easement, or a permanent surface drainage easement.
- 4.3.9 Storm drain facilities shall be extended with a subdivision or development to adjacent undeveloped properties for future extensions in accordance with approved drainage plans.

- 4.3.10 Existing surface drainage from adjoining property shall be perpetuated through the development or other means of disposal provided acceptable to the District Engineer.
- 4.3.11 Irrigation waters not controlled by a ditch or utility company and storm drain waters shall be conveyed by separate systems.
- 4.3.12 Minimum pipe diameter for any public storm drain shall be 18 inches for storm drain mains and 15 inches for storm drain laterals.
- 4.3.13 Lining for drainage channels shall conform to the following requirements:
  - a. Design Velocity Less than 6 FPS: Channel lining of non-eroding, long life, low maintenance material as approved by the District Engineer. Side slopes 3:1 maximum unless otherwise approved by the District Engineer.
  - b. Design Velocity 6 to 10 FPS: Channel lining of loose rock rip rap sized for velocity. Side slopes 2:1 maximum.
  - c. Design Velocity Greater than 10 FPS: Channel lining of concrete or an engineered equivalent.
  - d. Access road to be constructed when required.
- 4.3.14 Corrugated metal pipe for public improvements may be used only at specific locations approved by the District Engineer, it is not acceptable for District-owned storm drain systems.
- 4.3.15 Storm drain waters piped to a major drainage facility shall extend, as a minimum, to the 100 year flood line and be rip rapped from the outlet to the bottom of the channel in the direction of flow. Channel modifications for erosion control shall be designed so that the receiving channel or entering channel will contain the flows without erosion.
- 4.3.16 Constructed Public drainage facilities shall be piped in accordance with District standards.
- 4.3.17 All storm drain piping contained within the District right-of-way shall be a minimum of RCP Class III or the appropriate class when design requires a higher pipe support strength.
- 4.3.18 Standard headwalls shall be placed on the inlet and outlet of all public pipe culverts. For pipes up to and including 72 inches in diameter; the design, size and material used shall comply in all cases with District standards. Headwalls for pipes exceeding 72 inches require special design approved by the District Engineer.
- 4.3.19 Trash racks shall be provided at the upper end of all closed public conduits as approved by the District Engineer.
- 4.3.20 Interceptor swales with an erosion prevention lining are to be provided along the top of retaining walls and cut slopes to intercept drainage. When required by the District Engineer, swales shall be provided to intercept drainage from adjacent property.

- 4.3.21 Manholes for public improvements shall be located at junction points, changes in horizontal or vertical alignment exceeding the minimum allowable pipe deflection, changes in conduit size and at the end of public lines unless approved otherwise by the District Engineer. When permitted by the District Engineer, pipe placed on curves (horizontal and vertical) shall meet manufacturer's recommendations for curved alignment. All curves, radii, length of pipe joints, and types of pipe shall be shown on the plans. Manholes shall be spaced at intervals not greater than 300 feet for pipe sizes of 21 inches and smaller and at 500 feet maximum spacing for pipe sizing of 24 inches and larger, unless otherwise approved by the District Engineer.
- 4.3.22 Catch basins shall be installed at low points of vertical curves, at all major street intersections, and at sufficient intervals to intake the peak flow for the 25 year return storm runoff such that flows will not interfere with traffic or flood adjoining property. In no instance shall the flow of water extend more than half-way onto the lane adjacent to the curb. All storm drain lateral connections to storm drain mains shall be by manholes. Catch basins shall not tie into each other unless otherwise approved by the District Engineer. Flow along gutters and into inlets shall be computed by the rational method using coefficients based on zoning and ultimate future development.
- 4.3.23 Drainage structures under and or through roadway fills shall be designed to carry the runoff generated by the 100 year storm from fully developed conditions within the watershed, based on maximum density and in accordance with current zoning.
- 4.3.24 Storm drain easements for public improvements shall be a minimum width of 20 feet. The final easement width shall be determined by pipe width, required trench clearance, and excavated trench side slopes not less than 1:1 horizontal to vertical.
- 4.3.25 Reinforced concrete valley gutters for public improvements may be placed at street intersections only when approved by the District Engineer. The minimum valley gutter width shall be 6 feet. There shall be a concrete spandrel at all intersections of valley gutters.
- 4.3.26 All impermeable on-site private drainage shall be contained by Portland Cement concrete curb and gutter or longitudinal valley gutter to District standards.
- 4.3.27 Embankment shall not be placed within the 100 year flood plain of a major drainage facility without prior approval by the District Engineer. Where such approval is given, the embankment shall be faced with rip-rap sized for velocity to a minimum of 1 foot above the 100 year flood line. Development within areas shown on the Flood Insurance Rate Map (FIRM) shall comply with Douglas County ordinances.
- 4.3.28 Sump condition within streets shall have a paved overland concrete swale in a drainage easement to convey storm drain waters, in addition to an underground storm drain system. Catch basins shall be installed at sump locations at sufficient intervals to intake the peak flow for the 25 year return storm runoff.
- 4.3.29 Drainage shall not be diverted from one major drainage facility to another.

- 4.3.30 Any work which requires fill intended to be placed within the "waters of the State of Nevada" shall receive permission from the State Department of Environmental Protection prior to beginning construction.
- 4.3.31 Detention/retention basins shall have excavated side slopes no steeper than 5:1 horizontal to vertical. Access to basins shall be provided by a paved ramp with slope no steeper than 5:1 horizontal to vertical with minimum width of 12 feet. Basins on public property shall be fenced with a minimum 6 foot high chain link fence or as otherwise directed by District. Fence shall include gated access with a minimum width of 16 feet. The top 6 inches of soil in the basin areas shall have a maximum particle size of 3 inches. Basins shall be seeded with a drought tolerant mix of grasses in accordance with Soil Conservation Service recommendations. Vegetation shall be established prior to acceptance of detention basin by District. Retention basins will not be accepted by the District for maintenance.
- 4.3.32 The minimum allowable curb and gutter slope shall be 0.004 feet per foot.

### 4.4 Lot Drainage Swales (Private)

4.4.1 Standard lot line drainage swales are to be designed to carry the waters generated by a 100 year frequency storm, with a maximum of 6 lots contributing run-off to the swale. Discharge from swales shall be conveyed to a public drainage facility. When inlets and piping are used, catch basins shall be Type 3 and the pipe shall have a minimum diameter of 10 inches. Provisions shall be made for overland flow in the event that catch basins plug. Should it be necessary to provide for drainage from more than 6 lots and/or to exceed the maximum horizontal or vertical alignment, a modified design capable of conveying the run-off from the 100 year storm may be submitted for consideration by the District Engineer.

#### 4.5 Water Supply Ditches

- 4.5.1 No public storm drainage runoff shall be allowed to flow or discharge into any water supply ditch. No private storm drainage runoff shall be allowed to flow or discharge into any water supply ditch without the written approval of the ditch or utility company. Discharge of storm drain waters into a water supply ditch are not to be a contributing factor insofar as increasing the peak flow or total volume of water for a 24 hour period based on a 25 year frequency storm in said facility above that which exists at present.
- 4.5.2 Where water supply ditches are located within or adjacent to a subdivision/development, improvements and access as required for the operation and maintenance of the ditch shall be provided to the ditch company's approval. Any improvements within the ditch company's easements are subject to the ditch company's approval. Water supply ditches located within a subdivision/development shall be placed in an underground pipe system whenever possible.

# 5.0 IMPROVEMENT PLANS (PUBLIC AND PRIVATE)

## 5.1 General

All plans submitted to the District for acceptance shall be on standard 24 inch by 36 inch sheets. Each sheet of the plans shall have a north arrow, scale used, and shall carry a title block which shall contain the name of the project, owner(s) and type of design shown on the plan; the name and stamp of the Nevada registered professional civil engineer; the date, sheet number and total number of sheets; and any information necessary to clarify the design. The plans shall clearly indicate in plan and profile, the distinction between existing conditions and proposed improvements, and shall designate improvements as public or private. The plans shall show adjacent property owners. The District will not assume maintenance responsibility for access, drainage facilities, sanitary sewer facilities, and their associated structures located outside the limits of dedicated street rights-of-way or public easements, or which are not constructed to District standards for public facilities. Private facilities for access, drainage and sewerage located on private streets, lots or parcels are to be owned and maintained by the property owners. All designs shall be certified by a Nevada registered professional civil engineer. Upon concurrence by the District with the plans, the engineer shall provide the District Engineer with reproducible sepia-mylar copies of the plans and one set of prints of the plans, wet stamped and signed.

### 5.2 Requirements

All plans shall conform to District Standards, be signed and sealed by a Nevada Registered Civil Engineer, and conform to the following outline of procedures.

5.2.1 Title Sheet

Show the entire project to include, but not limited to, project name, owner, engineer, date, index, legend, vicinity map with the District limits shown thereon, street names, section lines, grant lines and corners, bench marks, pertinent notes.

#### 5.2.2 Utility Index

A single sheet of the subdivision or development showing the general location of water, sanitary sewer and storm drain systems, identifying and numbering all manholes and structures and indicating improvements as either public or private as appropriate. This shall include:

- a. The location of the development in relationship to the surrounding area.
- b. All properties to be serviced by the water and/or sewer system.
- c. All existing and proposed water mains, sewer mains and storm drains serving the development and their respective sizes.
- d. All valves, air valves, fire hydrants, blowoffs, manholes
- e. All street rights-of-way and required District easements.

- f. All street names, all lot lines and lot numbers, or property boundaries.
- g. The location of all wells within the boundaries of the development.
- h. Water service and sewer lateral locations.
- 5.2.3 Right-of-Way

Right-of-way lines on both sides of all streets, the boundaries of lots fronting on both sides of all streets, drainage easements, utility easements, section lines and corners, land grant lines, and temporary construction easements both existing and proposed shall be shown on the plans. All right-of-way and easement lines shall be properly dimensioned and noted.

- 5.2.4 Topography
  - 5.2.4.1 All pertinent topographic features shall be shown, such as street lines, curbs, sidewalks, shoulders, location and size of sanitary sewers, storm drains, water, gas, electrical, telephone lines and other underground facilities. Also show structures, houses, trees and other flora, drainage ditches, utility poles, fire hydrants, and all other features of the area, which may affect the design.
  - 5.2.4.2 Where proposed improvements meet existing infrastructure facilities, the plan shall show all pertinent existing elevations, gutter grades, center line of pavement, sewer and storm drain inverts, driveway locations, etc. for a minimum distance of 100 feet from any boundary of the development.
  - 5.2.4.3 When showing existing pavement or concrete in relation to new work, suitable shading or delineation shall be made of the new work.
- 5.2.5 Stationing and Orientation

The stationing on plan and profile shall be from south to north and west to east insofar as practical. All street center lines, beginning of curves, points of compound curves, end of curves and limits of work shall be stationed on the plans. Curve data shall include; centerline radius, length of curve, delta or central angle and tangent distance. Vertical curves shall include the length of the curve, BVC and EVC station and elevation, and the K-valve used (rate of vertical curvature).

5.2.6 Bench Marks

Bench marks shall be clearly indicated on the plans as to location, description, elevation and datum. The datum shall be that of the National Geodetic Survey (North American Datum of 1929 or as may be redefined), or its successor.

5.2.7 Typical Section

A typical section(s) for each type of street within the area to be improved, delineating the structural features, width of right-of-way, improvement dimensions and details on both sides

of all streets, and design subgrade resilience modulus and borings from the soil report, shall be a part of the plans.

5.2.8 Cross Sections

Cross sections shall be included in the plans when directed by the District Engineer. Normally this would occur in limited areas with unusual topographic features or when special conditions occur that would affect the work.

5.2.9 Grading and Drainage

Plans to include existing contours as fine continuous or dashed lines and proposed contours as solid lines, all cut and fill slopes; retaining walls; street grades in percent; and peak flows, for the 25 and 100 year storms, entering and leaving the subdivision or development and disposition of same; the 100 year flood line; spot elevations on streets, top of curbs, retaining walls, lots, surface drainage improvements; and drainage arrows showing individual lot drainage; and soil report requirements printed thereon.

5.2.10 Site Location and Site Drainage Map

Maps are to be included in the construction plans as set forth in the drainage report.

The Sepia-Mylars are to be reproduced from the original drawings that have been stamped and signed thereon by a Nevada Registered Civil Engineer.

5.2.11 Plan and Profile Sheets

Minimum scale 1" = 5' Vertical and 1" = 40' Horizontal.

- 5.2.11.1 Streets and Access Roads
  - a. Name of street
  - b. Plan Section: Show monuments, right-of-way width, improvements, traffic control devices, intersecting streets, center line stationing, horizontal curve data and stationing. Indicate bench mark location and elevation. Show existing facilities.
  - c. Profile Section: Along center line show existing and proposed grades including tangency slopes, vertical curve elevations and data, and the station and elevations of intersecting streets. Show existing facilities.
- 5.2.11.2 Storm Drains: If located within a public street section, show on the street plan and profile sheets.
  - a. Plan Section: Location of pipe in relation to street center line and/or easements, property lines, etc. Type and location of manholes and catch basins showing the station and number and rim elevations of each. Size, class and type of pipe. Location and type of maintenance access roads to manholes or structures, where

required. Typical channel section, where required. Indicate bench mark location and elevation. Show existing utilities.

- b. Profile Section: Existing and finished surface grades and pipe profile showing type size, slope and  $Q_5$  and the velocity at  $Q_5$  and the hydraulic grade line if the pipe is under pressure. For channels, also show the depth of flow for the 25 and 100 year storms. Manhole station, number, rim elevation and the invert elevation of all pipes entering or exiting and distance between manholes. Show existing utilities with pertinent elevations.
- 5.2.11.3 Sanitary Sewers: If located within a public street section, show on the street plan and profile sheets.
  - a. Plan Section: Location of pipe in relation to street center line and/or easements, property lines, etc. Type and location of manholes showing the station and number and rim elevations of each. Size, class and type of pipe. Service lateral locations with reference to station and property lines. Location and type of maintenance access roads, where required. Indicate bench mark location and elevation. Show existing utilities.
  - b. Profile Section: Existing and finished surface grades. Pipe profile showing type and class, size, slope, and velocity at peak flow. Manhole station, number, rim elevation and invert elevation of all pipes entering or exiting. Distance between manholes. Show existing utilities with pertinent elevations.
- 5.2.11.4 Water Lines: If located within a public street section, shown on the street plan and profile sheets.
  - a. Plan Section: Location of pipe in relation to street center line and/or easements, property lines, etc. Type and location of valves, tees, crosses, fire hydrants, blowoffs, services, meter boxes and other appurtenances. Show existing utilities.
  - b. Profile Section; Existing and finished surface grades and pipe profile showing type, size, and cover. Show existing utilities with pertinent elevations.

# 5.2.12 Details

List or show all District Standard Details being used in the project. Show any additional details as necessary for clarification of the improvements. Provide any necessary general notes, including the following note:

"All construction shall conform to District standards."

A Revocable Permit must be obtained from the Nevada Department of Transportation for any facilities encroaching upon state right-of-of-way and for any drainage disposal on the right-of-way. (Allow a minimum of 30 days for obtaining a permit).

## 5.2.13 As-Built Drawings

a. As-built drawings must be submitted to the District prior to acceptance by the District of any subdivision, development or facilities. The as-built drawings shall show all of the changes in the improvements constructed from the design plans. They shall also show the distance from the nearest downstream sanitary sewer manhole to each wye or tee, and to the terminus of each service at the property line.

b. The as-built drawings shall be submitted on reproducible sepia-mylar reproduced from the original drawings that have been stamped and sealed thereon by a Nevada Registered Civil Engineer verifying the as-built conditions. One set of as-built blueline prints shall also be submitted. If the improvement drawings were prepared using AutoCAD, a copy of the as-built drawings in AutoCAD shall be submitted to the District on diskette.

### 5.2.14 Plan Approval

In general, plan approval is accomplished in two stages:

- a. Tentative Water and/or Sewer System approval
- b. Plan Approval or Approved Plans
- 5.2.14.1 Tentative Water and/or Sewer System Approval

"Tentative Water System Approval" and/or "Tentative Sewer System Approval" is approval given to the general water and/or sewer system layout shown on the tentative plan for the development. This approval will remain in effect for sixty (60) days from the date indicated thereon.

In general, the tentative plan will show the overall development proposed including the street, lots, easements, buildings and other pertinent information concerning the development. The District will review the tentative plan and will indicate thereon the general nature of the on-site and/or off-site water and/or sewer system required to serve the development.

In the event no further action is taken on the development within the time period provided, the approval will expire and the tentative water and/or sewer system layout may be subject to further review by the District.

# 5.2.14.2 Plan Approval or Approved Plans

"Plan Approval" is approval given to the final design of the water, sewer, storm drainage and/or street systems for a specific development. No changes in the design will be permitted after the plans have been approved unless approval is given by the Engineer. Plans so changed

must be resubmitted to the District for review. Changes made in the design without approval by the Engineer may result in revocation of the "Plan Approval" and refusal by the District to accept any portion of the water, sewer, storm drainage and/or street systems.

In the event that construction within the development is not started within one hundred twenty (120) days after the "Plan Approval" being given by the Engineer, the "Plan Approval" will expire and the design may be subject to a further review by the District.

5.2.14.3 Changes in Plans After "Plan Approval"

If, during construction, changes in the water, sewer, storm drainage and/or street systems are required due to field conditions, such changes must be approved by the District, and the changes recorded on the "As-Built" drawings.

# 6.0 EASEMENTS

## 6.1 Requirements

- 6.1.1 Where required by the District, water mains, sewer mains and/or storm drains shall be installed in Gardnerville Ranchos General Improvement District easements granted by the Developer to the District for this purpose. The legal description of easements shall be prepared by the Developer's Engineer. The District, after review and approval, will prepare easement documents for execution by the Developer.
- 6.1.2 Easements are to be a minimum width of 20 feet. The final easement width shall be determined by pipe width, required trench clearance and excavated side slopes not less than 1:1 horizontal to vertical. Easements for major drainage channels shall include adequate width for an access road adjacent to the channel.

### 7.0 INSPECTION AND TESTING

#### 7.1 General

Inspection and testing shall be provided by the District with additional personnel, materials and equipment provided by the contractor as required. The owner or developer shall reimburse the District for all inspection and testing costs. The type and frequency of inspection shall be adequate to assure compliance with the intent of the plans, specifications, special provisions, and District standards. Materials, gradation, tests, etc., shall conform to the S.S.P.W.C. Testing shall be in accordance with District standards.

### 7.2 Commencement of Work

No work will be permitted nor will inspection by the District be provided for the installation of the proposed water and/or sewer system until the following has occurred:

- a. Plans signed by the District's General Manager.
- b. Payment of District's Engineering Fees.
- c. Issuance of "District's Permit for Water, Sewer, Storm Drainage and/or Street Construction."

Failure to comply with these requirements will result in the District's refusal to accept the work and to supply water to the development.

#### 7.3 Inspection Requirements

- 7.3.1 The developer shall notify the District of the date and hour that work on any of the following items is expected to begin, notification to be given not less than 48 hours in advance; and, if thereafter conditions develop to delay the start of work, the developer shall notify the engineer of the delay, not less than 2 hours before the work was to begin:
  - a. Mass grading within street right-of-way.
  - b. Laying of water lines, sewer lines, drainage lines or appurtenances.
  - c. Backfilling of water lines, sewer lines, drainage lines or appurtenances.
  - d. Placing the concrete for curbs, gutters, sidewalks, alleys or valley gutters.
  - e. Placing of any type of base course or courses.
  - f. Priming base course.
  - g. Placing asphalt concrete or Portland cement concrete pavement.
  - h. Sealing asphalt concrete or Portland cement pavement.
  - i. Installation of bonded off-site improvements.

- 7.3.2 Inspection will include but not be limited to the following:
  - a. Back Fill Control. Inspection of each lift to insure conformance with S.S.P.W.C., Section 305
  - b. Underground Utilities
    - i. Inspection of pipe materials and bedding prior to the placing of any pipe to assure conformance with S.S.P.W.C. Section 305. Collection of applicable manufacturer's certifications.
    - ii. Inspection of installation of pipe laid to grade, mortar jointed or gasketed pipe prior to placing any material around or above pipe to assure conformance with S.S.P.W.C. Sections 306 and 307.
    - iii. Inspection of each lift or backfill to insure conformance with S.S.P.W.C. Section 305.
    - Pipe Installation by Utility Company: Inspection and testing per utility company's project engineer (not less than District Testing Requirements).
    - v. Manholes, Catch Basins, Drop Inlets: Sufficient inspections to determine compliance with S.S.P.W.C. Section 311.
  - c. Aggregate Base Courses: Streets, curbs, gutters, sidewalks and alleys. Sufficient inspections to assure compliance with S.S.P.W.C. Sections 308 and 336.
  - d. Portland Cement Concrete
    - i. Curbs, gutters, sidewalks, alleys and valley gutters: sufficient inspections to assure compliance with S.S.P.W.C. Sections 312 and 336.
    - ii. Structures-Headwalls: Sufficient inspections to assure compliance with plans, details and S.S.P.W.C. Section 311.
  - e. Asphalt Concrete
    - i. Sufficient inspection time for determination as to compliance with plans, details and S.S.P.W.C. Sections 316, 317, 318, 319, 320, 321 and 322 as applicable.
    - ii. On-site observation at the plant, with particular emphasis on temperature control, prior to initial delivery of plant mix to the project.
  - f. Sewer and Pressure Lines
    - i. Sewer lines: Ball and flushing operation to be done in presence of the District inspector.

- ii. Pressure tests: To be accomplished in presence of the District inspector.
- g. Landscaping, common area amenities

Sufficient inspections to assure compliance with S.S.P.W.C. and approved plans and specifications.

### 7.4 Testing Requirements

Testing shall be in accordance with District standards and S.S.P.W.C. Section 336.

- 7.4.1 Testing of materials to assure compliance with Part 2, Construction Materials, of S.S.P.W.C. Samples shall be taken from materials supplied at the job site.
- 7.4.2 Compaction of Subgrade and Base Material (streets, sidewalks, curb, gutter, etc.) Compaction Test - Minimum of 2 tests per block of public and private streets complying with S.S.P.W.C., Section 302.03, 308.05 or 309.03 as applicable, and/or 1 test up to every 10,000 sq. ft. of parking area, and other applicable areas, as per ASTMD-1557.
- 7.4.3 Asphalt Concrete.

Asphalt Concrete shall conform to the requirements of Section 320 of the S.S.P.W.C. Asphalt concrete paving will be tested for density on a "lot" basis in accordance with S.S.P.W.C. Section 336.03.04 except that a "lot" shall consist of 300 tons of bituminous concrete or portion thereof exceeding 150 tons for each day's placement, with each day's placement consisting of at least one "lot".

7.4.4 Portland Cement Concrete (P.C.C.) tests shall conform to S.S.P.W.C., Section 336.03.02. A mix design prepared in accordance with ACI211, Trial Batch Method shall be submitted by the contractor and approved by the District Engineer.

P.C.C. exposed to freeze-thaw environments shall conform to S.S.P.W.C. Section 202.12 and have the following characteristics:

Minimum 28-day compressive strength	4000 psi
Minimum sacks of cement per cubic yard of concrete	
Air content of freshly mixed concrete	6 ± 1½%
Maximum slump	4 inches
Maximum water/cement ratio	0.45

All materials shall conform to SSPWC Section 202.

7.4.5 Trench Bedding and Backfill

Compaction Test for Sewer Main, Water Main and Utility Trenching (including Laterals)

 Bedding: 2 tests per block or between manholes complying with Standard Details for Public Works Construction, Section 2, Drawing No. 2-1 (305), page 1, as per ASTM D1557.

- b. Backfill: 2 tests for each 2 feet of lift per block or between manholes, complying with Standard Details for Public Works Construction, Section 2, Drawing No. 2-1 (305), page 1, as per ASTM D1557.
- 7.4.6 Roadway Fills

Compaction Test - A minimum of 1 test per each lift at intervals not exceeding 500 yards to assure compliance with S.S.P.W.C., Section 304.05.

- 7.4.7 Sanitary Sewer Pipe
  - 7.4.7.1 General
    - a. Sewer Mains and Appurtenances.

Category to include sewer mains, laterals, manholes and appurtenances

- i. Site Overview Inspection Minimum of one inspection per increment unit of work by contractor.
  - 1. Inspect for obvious vertical or horizontal alignment or location conflicts (i.e., buried utilities).

NOTE: USA dig locations must be complete prior to performing this inspection.

- 2. Inspect manhole plug installation and verify plug is braced and tied off properly to prevent blockage of downstream lines due to plug failures. Schedule manhole plug inspection. The District must approve the installation in writing prior to proceeding with any subsequent inspections.
- ii. Trench or Manhole Excavation Inspection Minimum of one inspection per increment unit of work by contractor.
  - 1. Inspect excavation slopes and depths for minimum safety standards per project specifications or State and Federal Requirements.
  - 2. Inspect bottom of excavation prior to placing of bedding, pipe or manhole to ensure that subgrade material is in general conformance with design grade and alignment or location.
  - 3. Inspect to ensure that subgrade material is uniform and free of excess moisture and deleterious material.

- 4. Inspect to ensure that trench excavation widths and grades are in conformance with project plans and specifications.
- 5. Inspect to ensure that manhole location and invert elevations have been laid out by a licensed engineer or land surveyor for slopes less than 0.4%.
- 6. Inspect to ensure proper compaction methods are utilized.
- iii. Bedding Inspections –Minimum of one inspection per increment unit of work by contractor.
  - 1. Inspect to determine that native material is suitable for bedding or whether imported bedding material is required as per the specifications by verifying test results.
  - 2. If imported bedding is utilized, inspect to ensure that the material meets the project specifications by verifying test results.
  - 3. Inspect to ensure that bedding material is placed at the proper depth, and is properly compacted in conformance with the project specifications by verifying compaction test results from testing firm.
- iv. Pipe Inspections Minimum of one inspection per increment unit of work by contractor.
  - 1. Inspect to ensure that pipe supplied to the project meets the plans and specifications, including material and class, and is not broken or defective.
  - 2. Inspect to ensure that pipe is laid properly in conformance to the design alignment and grade, and to the specifications.
  - 3. Inspect to ensure minimum horizontal and vertical clearances are met or other approved method is installed if required by the plans and specifications.
  - 4. Inspect to ensure that the pipe is laid with bell ends up hill, and is properly jointed in accordance with the specifications.
  - 5. Verify main lines that do not end in a manhole are surveyed by a licensed engineer or land surveyor for line and grade prior to backfill.

- 6. Inspect to ensure that sewer lateral wyes and tees are placed at a minimum of 45 degrees above the spring line, and that lateral ends are marked. Note: sewer laterals are not allowed to be tied into any manhole.
- 7. Inspect to ensure that pipe core drill and saddle taps confirm to the plans.
- v. Bedding Backfill Inspections Minimum of one inspection per increment unit of work by contractor in each zone: bedding to spring line, spring line to top of pipe, and top of pipe to one foot above top of pipe.
  - 1. Inspect to confirm adequacy of bedding material in conformance with specifications.
  - 2. Inspect that bedding backfill operation is in conformance with specifications for proper lifts and compaction by verifying any compaction test results.
  - 3. Inspect to ensure hand tamping bars are utilized to compact bedding material under pipe haunches.
  - 4. Verify warning tape is laid in trench 1 ft. above pipe.
- vi. Precast Manhole Inspections Minimum of one inspection per manhole.
  - 1. Inspect to ensure that precast manhole meets the project specifications.
  - 2. Inspect to ensure that precast structure is the proper diameter and is placed at proper grade and alignment, and that proper connections are made with pipes in conformance with the plans and specifications.
  - 3. Inspect to ensure double layer of mastic material is placed between joints, and that ladder and pick holes and grade rings are properly grouted.
- vii. Poured-in-Place Manhole Inspections Minimum of one inspection per manhole for bedding, forms and connections.
  - 1. Inspect to ensure that the base material is properly prepared for forms for poured-in-place manhole.
  - 2. Inspect to ensure that form layout is in conformance with the plans and specifications for alignment and

grade, forms material and workmanship, and steel size, number, location and installation.

- viii. Poured-in-Place Concrete Placement Inspections Minimum of one inspection per manhole.
  - 1. Ensure that weather conditions are appropriate per specification requirements.
  - 2. Inspect to reconfirm that base material, forms and steel have not changed.
  - 3. Inspect first truck delivery of the day to ensure that the material meets the specifications and is from an approved source.
  - 4. Inspect the material out of the truck, using judgment to determine if the material is appropriate to pour, and call in testing firm immediately if there is any question.
  - 5. Inspect general placement, workmanship and finishing activities of the contractor's crew.
  - 6. Inspect to ensure that cold weather blankets or other materials are on hand when required by specifications.
  - 7. Within first or second day of pour, inspect to ensure that proper connection shave been made, manhole channel and shelves are finished in accordance with the Standard Specifications for Public Works Construction, proper finish has been performed, and work is free from cracks or other deficiencies.
  - 8. Inspect to ensure that concrete meets specifications by receiving testing results from testing firm, and verifying compliance.
- ix. Trench or Structure Backfill Inspections Minimum of one inspection per structure, and one inspection per increment unit of trench work by contractor.
  - 1. Inspect trench/structure backfill material for adequacy in conformance with specifications.
  - 2. Inspect to ensure that backfill is placed in proper lifts, and meets specifications for compaction by verifying compaction test results from testing firm as required.
  - 3. Inspect to ensure that backfill is brought completely to finish surface grade or to pavement section subgrade

elevation as appropriate in accordance with the project plans and specifications.

- x. Final Sewer Inspection and Testing.
  - 1. Inspect ball and flush of all sewer mains in accordance with these specifications. Note, line must be clean.
  - 2. Inspect mandreling of all sewer mains in accordance with these specifications.
  - 3. Pressure test all mains and laterals in accordance with the specifications.
  - 4. Inspect infiltration test of all sewer mains if applicable.
  - 5. Inspect vacuum tests of all manholes in accordance with these specifications.
  - 6. Video tape all sewer mains. Contact the District to schedule the televising inspection.

NOTE: Ball, flush and mandrel inspection must be complete, and line must have water in it to be televised.

- 7. Inspect to ensure manhole frame and covers are in accordance with the specifications and are set to grade with no more than 12" of grade rings.
- 8. Inspect to ensure concrete collars are installed with rebar when located outside paved areas.
- 9. Inspect to ensure manholes and lines are free of dirt, debris, and grout following adjustment of manholes to grade.
- 10. Inspect installation of manhole markers for location and conformance with the plans.
- 11. Inspect to ensure all lateral markers are in place.
- 12. Inspect to ensure plug is removed after all other inspections have been completed and accepted by the District's Engineer.

### 7.4.7.2 Sewer Line Tests

a. Ball and Flush

- i. 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 stops the ball, the contractor shall remove the obstruction and/or make necessary repairs.
- ii. Deflection Test

The following supercedes Section 336.03.09.01, "Deflection Test for Plastic Pipe and Fittings," of the Standard Specifications for Public Works Construction.

Installed pipe shall be tested to ensure that vertical deflections for plastic pipe do not exceed the maximum allowable deflection. For all pipes 27-inch (ID) or less, a mandrel shall be pulled through the pipe by hand to ensure that maximum allowable deflections, as shown in the following table, have not been exceeded.

Nominal Size (inches)	SDR-35 ASTM Base Inside Diameter (inches)	Allowable Deflection (percent)	Mandrel Size (inches)
8	7.665	5	7.282
10	9.563	5	9.085
12	11.361	5	10.793
15	13.898	4	13.342
18	16.976	4	16.297
21	20.004	4	19.204
24	22.480	4	22.581
27	25.327	4	24.314

Deflection tests shall not be performed until after completion of placement and compaction of backfill. The pipe shall be flushed prior to testing. If the mandrel fails to pass, the pipe will be deemed to be over-deflected. All costs incurred by the Contractor attributable to mandrel and deflection testing, including any delays, shall be borne by the Contractor at no additional cost.

The mandrel shall:

1. Have an odd number of legs (nine legs maximum), and be a rigid, non-adjustable mandrel having an effective length not less than its nominal diameter.

- 2. Be fabricated of steel; be fitted with pulling rings at each end; be stamped or engraved on some segment other than a runner, indicating the pipe material specification, nominal size, and mandrel OD; and be furnished in a suitable carrying case labeled with the same data as stamped or engraved on the mandrel.
- iii. Air Test (Sewer Main)

The following provisions supercede Section 336.03.07.04, "Air Pressure Tests," and Section 336.03.07.04.1, "Test Requirements," of the Standard Specifications for Public Works Construction.

- 1. Amount of Testing
  - a. The Contractor shall air test all the sewer lines after backfilling and settling of the trenches, and shall furnish all equipment and personnel required to perform the tests. In addition to the air test of pipe, the Contractor shall vacuum test all of the manholes. Any manhole that does not pass shall be repaired and retested until satisfactory.
  - b. To facilitate the detection of any leaks that may have occurred during the pipe laying operation, the Contractor may, at his/her option, air test any or all of the sewer lines prior to backfilling. However, this test will be in addition to the required air or hydrostatic test following the backfilling and settling of the trench.
- 2. Leakage Allowance
  - a. The leakage allowance requirements of the air test shall be considered satisfied for the section of pipeline being tested if the time required for the pressure to decrease from 3.5 pounds per square inch (psi) to 2.5 psi is greater than 30 minutes between manholes.
- 3. Testing Procedure
  - a. The low pressure air test is a test that determines the rate at which air under pressure leaves an isolated section of pipeline. This rate indicated the presence or absence of pipe damage and/or pipe of poor quality. The test

procedure is described as follows: The section of pipe to be tested is plugged at each end. The ends of all branches, laterals, and wyes which are to be included in the test are sealed or plugged. All plugs shall be carefully braced to prevent slippage and blowout due to internal pressure. One of the plugs provided must have an inlet tap or the provision for connecting an air hose.

- b. Connect one end of the air hose to the inlet tap on the plug, and connect the other end of the hose to portable air control equipment. The air control equipment can then be connected to a source of air supply, such as a portable air compressor.
- c. After the air hoses are properly connected, inject air into the test section. Monitor the air pressure so that the pressure inside the pipe does not exceed five (5) pounds per square inch gauge (psig).
- d. When the pressure inside the test section reaches four (4) psig, throttle the air supply so that the internal pressure is maintained between four (4) and three and five-tenths (3.5) psig for at least two (2) minutes for the temperature of the air to come to the equilibrium with the pipe walls.
- e. After the temperature has been allowed to stabilize for the two-minute period, the air supply should be disconnected, and the pressure allowed to decrease to three and five-tenths (3.5) psig. At three and five-tenths (3.5) psig, a stop watch is to be started to determine the time required for the pressure to drop to two and five-tenths (2.5) psi.
- iv. Infiltration

Where the sewer is laid in groundwater, the District shall require infiltration tests.

In areas where the groundwater is at least two feet above the crown of the pipe, the contractor shall backfill to a depth to prevent floating of pipe and, in no case, less than one foot above the groundwater, or four feet above the crown on the pipe, whichever is greater. After the initial backfilling has been completed, the District will measure the amount of infiltration at the lower manhole of each section being tested.

The final decision as to the method of testing by means of infiltration shall be made by the District's Engineer.

The allowable leakage in the sewer lines shall be equal to the amount allowed when testing by means of the exfiltration test. Infiltration shall not exceed 200 gallons per mile per day per inch of diameter of pipe at 5 foot head.

v. Air Test (Manhole)

The Contractor shall furnish all labor, equipment, and materials necessary to perform a manhole vacuum test. The District shall approve the vacuum test equipment. All vacuum tests shall be conducted in the presence of the District.

Each manhole shall be tested immediately after assembly and prior to backfilling. All lift holes shall be plugged with an approved non-shrink grout. All pipes entering the manhole shall be plugged, taking care to securely brace the plug from being drawn into the manhole. The test head shall be placed at the inside of the top of the cone section, and the seal inflated in accordance with the manufacturer's recommendations.

A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to nine inches. The manhole shall pass if the time is greater than sixty seconds for 48" diameter, 75 seconds for 60", and 90 seconds for 72" diameter manholes.

If the manhole fails the install test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. Retesting shall proceed until a satisfactory test of obtained.

vi. Video Taping

The interior of all sanitary sewer and storm drain lines, 48" or smaller in diameter, shall be inspected with a video camera. The videotaping shall be performed after the ball and flush test and the mandrel test. An acceptable videotape shall be submitted to the District for approval prior to paving, and as described hereinafter.

- 1. The Engineer of Record (EOR) shall be present for all videotape inspections. The EOR shall direct the videotape operations throughout the entire inspection process. The absence of voice-over by the EOR shall be grounds for rejection.
- 2. All pipes shall be clean and free of standing water prior to videotaping.
- 3. All manholes, catch basin laterals, and sewer laterals will be identified using the numbering system from the approved plan set.
- 4. Each segment videotaped will begin with a voice-over by the EOR, stating the date, project name (detailed enough to identify similarly named projects), starting point, ending point, direction of travel, pipe, and type and pipe size.
- 5. The camera used shall have an articulated head and be adjustable for height in order to have the camera centered in the pipe being televised. The camera shall have an adequate illumination system, be capable of taking color still photos, and provide visibility to the entire inside diameter of the pipe.
- 6. The camera shall be stopped at all defects encountered, and a still photo taken of the defect. The EOR shall not authorize paving activities until said defects have been satisfactorily corrected and meet the applicable City standards as identified via additional video taping following correction of the defects.
- 7. The EOR will submit the videotape to the District, along with a written report of the findings or other notes, what deficiencies were encountered, how they were corrected, still photos, all plans used to produce the report, and a set of as-built drawings identifying all lines that were videotaped. Said report and drawings shall be submitted to the District's Engineer.
- 8. With the submittal of the videotape, as-built drawings and written report by the EOR, the piping is conditionally accepted, and the Contractor is released to proceed with the subsequent paving operations.
- 9. Any obvious defects greater than ¼-inch in depth or grade, workmanship or materials observed by the

### GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT POLICY AND PROCEDURES MANUAL

EOR or the District shall be repaired or replaced by the Contractor prior to acceptance.

# 7.4.8 Water Mains

Water mains must be disinfected to meet the requirements of the Nevada Division of State Health. Water mains will be pressure tested in accordance with S.S.P.W.C. Section 336.03.08.

# 8.0 STREET LIGHTING (PUBLIC AND PRIVATE)

## 8.1 General

Street lighting shall be installed unless otherwise waived by the District Board with any subdivision or development in accordance with the following requirements:

- a. The street lighting shall be the responsibility of the subdivider or developer who shall make all necessary arrangements with the utility company involved for the installation of such lights as approved by the District.
- b. Street lighting plans are to be prepared by the utility and shall be submitted by the subdivider or developer to the District for review. Such plans shall show the location of each light, size of illuminaires in watts or lumens, number of street lights, total additional charge to the district and a statement that the street light illumination meets the requirements of District standards.
- c. All street lighting within each construction phase shall be complete and operational prior to issuance of any certificate of occupancy.
- d. The District requires "acorn" style lights on black steel fluted poles (SPPCo standard). The lights shall be installed at turning points, cul-de-sacs, and intersections only. The design of new residential lighting shall be coordinated with SPPCo, and the District will provide approval of the plan subject to meeting the standards set forth in the Manual and set forth by the County.
- e. The District will not accept streetlights located on private streets for maintenance, nor will the District be responsible for utility bills.
- f. Poles and lights to be located on private streets shall meet the aforementioned standards for type and model.
- g. Streetlights on regional roads shall be to the County's standards, but subject to the District's review and approval. The District will require additional lighting near parks, pedestrian crossings, and other areas of public interest.
- h. Parking lots and other privately maintained space available to the public should use decorate lights and poles similar to the "acorn" SPPCo futures and fluted black steel pole.

# 8.2 Standards

- a. Streetlights shall be installed at intervals no greater than 700 feet, at every street intersection, and at every cluster mailbox.
- b. Illuminaires shall be 200-watt High Pressure Sodium.

## 9.0 ANNEXATION TO THE DISTRICT

#### 9.1 General

Water and/or sewer service will not be extended to areas outside the District's boundaries. Areas so located must be annexed to the District prior to the installation of water and/or sewer mains and connection to the District's systems.

Annexation requirements are detailed in Appendix E.

## 9.2 Application for Annexation; Expiration

An applicant for annexation of property to the District shall, within six (6) months succeeding the date of approval of the application for annexation. Should an applicant fail to complete all conditions of annexation within six (6) months succeeding the date of approval of the application for annexation, the application shall expire and the applicant must reapply to the District for annexation of the property.

9.2.1 The Board, for good cause shown, may extend the period in which an applicant may complete the conditions of approval of an application for annexation. Should an applicant require more time to complete the conditions of annexation, the applicant shall request from the Board, at its next regularly scheduled monthly business meeting, an extension of time within which to complete the conditions of annexation. The applicant must demonstrate to the Board that a condition(s) of annexation was not possible of completion within the allotted six (6) months period. An applicant's dilatory conduct towards completion of conditions of annexation shall not be cause for an extension of time within which to complete the conditions of an application for annexation.

#### 9.3 Abandonment / Sale of Open Space

Upon written application to the District for abandonment of a portion of the District-owned open space by an abutting property owner to an area of open space owned by the District, the District shall conduct a public hearing, after proper notice, for the consideration and possible action the request for abandonment or relinquishment of GRGID's interest in the portion of the open space identified in the application.

- 9.3.1 If, upon public hearing, the Board is satisfied that the public will not be materially injured by the proposed vacation of the District's interest in the open space, it shall order the open space interest of the District vacated and abandoned. The Board may make the order conditional, and the order becomes effective only upon the fulfillment of the conditions prescribed.
- 9.3.2 The applicant shall submit with an application satisfactory evidence of the existence or nonexistence of any public utility easement over the property, which is the subject of the application for, transfer. If a utility has an easement over the property identified in the application, the Board shall provide in its order for the continuation of that easement.
- 9.3.3 All applications for the transfer of ownership of the District-owned open space shall include satisfactory written evidence of the following:

- 9.3.3.1 Payment of, or a written promise to pay to the District all costs incurred by the District, including, without limitation, publication costs, administrative costs, engineering fees, legal fees, and appraisal fees. Current valuation information pertaining to the parcel of the District-owned open space sought to be transferred by the application shall be submitted with the application for transfer of the District-owned open space. Valuation information, through an appraisal or market analysis, has been deemed necessary by the Board to accompany all applications. Should the Board deem the valuation information information information information information information information incomplete or insufficient, the Board may order an appraisal, which shall be paid for by the applicant.
- 9.3.3.2 Payment of an amount determined to be fair consideration or compensation to the District for the value of the District's interest being transferred.
- 9.3.3.3 The applicant shall be responsible for the preparation and filing of any map or maps required to carry into force and affect the order of abandonment issued by the Board. For example, if a map indicating the adjusted lot lines of the applicant is required to be filed for record, the applicant shall prepare the map and cause it to be recorded.
- 9.3.3.4 Any order of abandonment must be recorded in the office of the County Recorder, if all of the conditions of the order have been fulfilled, and upon the recordation title to the property abandoned shall be vested according to the provisions of the order.

# 9.4 **Procedures Therefore**

The Board determines that its policy will be to review all areas of open space owned by the District to determine whether or not any property owner(s) has encroached into or onto the District-owned open space. Should the District discover an encroachment, the District shall notify the encroaching party of its encroachment and require the encroaching owner to:

- 9.4.1 Remove the encroachment from the District-owned open space; or
- 9.4.2 Pay the District fair consideration for the area of open space on which the property owner(s) has encroached.
- 9.4.3 Should an encroaching property owner request transfer of ownership of the area of the District-owned open space on which the encroachment has occurred, the property owner(s) shall file an application for abandonment, transfer or vacation of the open space area with the District. The procedures set forth in this Section 9.2 shall then be followed.

# 9.5 Action of the Board

The Board determines that its policy for transfer of ownership of the District-owned open space areas shall apply only to those areas which are small in size and irregularly shaped, and which would not be the subject of potential development. Should the Board determine that an area of open space, which is the subject of an application to transfer ownership of the District's open space interest, is susceptible of development, and would command a fair return if sold on the open market, the District shall not abandon its interest in the open space. In such cases, it is the policy of the District that the property, if the District chooses to relinquish its interest, shall be the subject of offering to the public at the highest and best price to be obtained from sale of the property.

# 9.6 Open Space Leasing Policy

9.6.1 Findings.

The Board has made several findings relating to District-owned open space in a series of public meetings which have been conducted by the Board. The Board reiterates those findings as an integral part of its policy relating to the leasing of open space pursuant to the provisions of this policy. The Board has found as follows:

- 9.6.1.1 The District is the owner of certain parcels of land located throughout the District which were dedicated to the District. The District holds title to the parcels of land as open space.
- 9.6.1.2 The dedication of parcels of land to the District for open space is restricted by the condition that open space be used for a public purpose.
- 9.6.1.3 The Board has defined a public purpose use to be where the open space is directly controlled by the District, and the public, in all or some limited portion of the property, has the right to use it in some way.

The Board further finds that to constitute a public use of a parcel of open space, the public must to some extent be entitled to use or enjoy the property as a matter of right. The Board further finds that it is not required that the entire community, or a considerable portion of it, should directly participate in the benefits derived from the property leased pursuant to this policy, and the Board also finds that for a lease to be approved it is not required that all portions or segments of the community derive an equal benefit from a lessee's use of a parcel of open space.

9.6.1.4 The Board has found, and determined its policy, that any person contemplating a lease of the District owned open space must propose a public use or purpose to which the parcel of open space would be applied if the Board approves of a lease pursuant to this policy.

#### 9.6.2 Hearings Required

Upon written application to the District for lease of a portion of the District owned open space, the District shall conduct a minimum of two public hearings, after proper notice, for the consideration and possible action on the request for a lease of, and the lease agreement for, a portion of the District owned open space identified in the application.

- 9.6.2.1 If, upon a minimum of two public hearings, the Board is satisfied that the public will be materially benefited by the proposed lease of a parcel of District owned open space, it may order that the lease of the open space be prepared and, at a second public hearing, approved with general and special conditions determined in accordance with this policy, and on a case-by-case review of each application for a lease of District owned open space. The Board may make the order conditional, and the order will become effective only upon the fulfillment of the conditions specified.
- 9.6.3 Lease Application.

All applications for a lease of District-owned open space shall include satisfactory written submission of the following:

- 9.3.3.1 The application shall identify the name and legal composition of the proposed lessee.
- 9.3.3.2 The application shall identify the nature of the proposed use to be carried on or conducted in or upon the parcel of open space, which is the subject of the application.
- 9.3.3.3 The application shall identify all the proposed terms and provisions of the lease requested.
- 9.3.3.4 The application shall identify such reasonable financial information as the Board may request regarding the proposed lessee.
- 9.3.3.5 The application shall identify the proposed improvements that would be constructed by the proposed lessee if the lease were approved, together with all required drawings, specifications and plans. No lease proposal which is approved shall be effective until such time as the lessee obtains all other required county, state and/or federal approvals, where applicable.
- 9.3.3.6 The application shall also provide satisfactory evidence of the existence or non-existence of any public utility easement over the parcel of open space, which is the subject of an application for lease. If a utility has an easement in, over or under the property identified in the application, the Board shall provide for the continuation of that easement.
- 9.3.3.7 The application shall provide current valuation information pertaining the parcel of District owned open space sought to be leased by the applicant, and the valuation information shall be submitted with the application for lease of District owned open space. Valuation

information, through an appraisal or market analysis, has been deemed necessary by the Board to accompany all applications. Should the Board deem the valuation information incomplete or insufficient, the Board may order an appraisal of the parcel sought to be leased, with the costs of the appraisal being borne by the applicant.

- 9.6.3.8 The application shall contain a written commitment by the applicant to pay to the District all costs incurred by the District in review of the application, including, without limitation, publication costs, administrative costs, engineering review fees, legal fees and appraisal fees.
- 9.6.3.9 The application shall specify that the applicant agrees to pay rent in an amount determined by the Board to be fair rental value or compensation to the District for the value of the parcel sought to be leased. The Board may, but is not required to, adjust (including a rent waiver) the amount of fair rental value where the proposed lessee derives an income from sponsoring or promoting the public use. The Board may also determine fair rental value taking into account the economic benefit derived by the proposed lessee.
- 9.6.3.10 The application shall contain an accurate legal description of the parcel of open space sought to be leased. Should the legal description be deemed insufficient, the Board may order the parcel surveyed with the cost of the survey borne by the applicant.
- 9.6.3.11 The application shall contain satisfactory evidence that the applicant has provided specific written notice of the application to all those property owners within a 1/4-mile radius of the parcel of open space sought to be leased. Proof of mailing of such notice shall be submitted to the Board as part of the application. The applicant shall provide notice by certified mail, return receipt requested.
- 9.6.3.12 Should the proposed use result in any additional water consumption on the parcel of open space, the applicant shall dedicate water rights which shall meet or exceed the quantity and quality of water rights required by the District's Water Rights Dedication Policy found as Appendix F of this Manual.
- 9.6.4 Procedure for Final Lease Approval
  - 9.6.4.1 Should a complete application be submitted to the District, it shall be reviewed by the Board at a regularly conducted monthly general business meeting. At the first hearing on the application for lease of District owned open space, the Board may act to approve, conditionally approve or disapprove of the lease application. Should the Board approve or conditionally approve of the lease application, it shall specify such terms and conditions to be contained in a lease agreement, including, without limitation, the area of the leased open space, the commencement and ending date of the term of the lease, whether an

option to renew the lease will be granted, the monthly, quarterly or annual rent to be paid, whether rental will be adjusted during the term of the lease on annual or other basis based on the Consumer Price Index or other factors, a penalty for late payment of rent, lessee improvements, use of the premises, reasonable rules and regulations relating to the leased open space, insurance requirements, security deposit, waste or nuisance, and default provisions.

- 9.6.4.2 If approved, the leased open space shall be used solely for the use and purpose specified in the approval by the Board, and for no other purpose. The use of the leased open space shall not be changed without an application thereto meeting all of the applicable criteria of an original application for lease of open space, where applicable. The use approved shall not in any manner increase the risk covered by the District's insurance or result in raised insurance or cancellation of the District's insurance policy even if such use may be in furtherance of the public purpose proposed by the application.
- 9.6.4.3 If approved, the lessee shall not, at any time, use, store or dispose of any hazardous substances on the parcel excepting only the use and storage of such substances that are customarily used in the operation of lessee's improvements, nor shall the lessee keep, use or sell anything prohibited by any policy of fire or hazard insurance covering the parcel. Hazardous substance means any hazardous waste, substance or toxic material, including any petroleum based product, regulated under any environmental laws or regulations applicable to the parcel of District owned open space after the construction of the lessee's improvements.

The proposed lessee shall, at its own expense, comply with any current or hereafter enacted environmental cleanup responsibility laws (cleanup laws) affecting the public use and operation of it on the District's parcel of open space.

The lease approved shall contain adequate assurance by the proposed lessee that it shall comply at all times with cleanup laws.

9.6.4.4 If approved, the lessee shall dedicate to the District a sufficient quantity and quality of water rights which shall meet or exceed the quantity and quality of water rights required by the District's Water Rights Dedication Policy found as Appendix F of this Manual to serve the allowed use for the open space approved for a lease. No lease shall become effective until the water necessary for the lessee's use has been dedicated to the District.

# 9.6.5 Improvements

The application for lease of District-owned open space shall contain written assurance that any improvements constructed on the District owned open space shall, at the conclusion of the lease and any renewals thereof, be owned by the District. During the term of the lease, the lessee shall agree, at its expense, to maintain the premises in good and safe condition as determined by the District, and lessee shall be responsible for all costs of the maintenance of the interior and exterior of the premises. All utility services required by the lessee shall be paid by the lessee with the lessee listed with the utility company as the responsible party. All service charges shall be without recourse to the District.

During the term of the lease, the District shall have the right to enter the leased premises at all reasonable times to examine the same and to specify such repairs, alterations, improvements or additions as the District may deem necessary or desirable, and the District shall be allowed to take all materials into and upon the leased premises that may be required, in the District's discretion, to make such repairs, alterations, improvements or additions. All costs incurred by the District shall be paid by the lessee in addition to any other payments required by the lease.

9.6.6 Rules and Regulations

The District may establish rules and regulations for use and occupancy of the leased parcel of open space. The District agrees to solicit the lessee's opinion regarding the proposed rules and regulations, but is not obligated to defer to the lessee's opinion. Failure to keep and observe such rules and regulations shall constitute a material breach of the terms of the lease. The District will provide the lessee notice of such rules and regulations within 30 days of adoption.

9.6.7 Breach and Default

The Board, at the first public meeting conducted to review the application for lease of District owned open space, shall specify such acts or omissions which shall constitute a breach of the lease and default of the lessee. Such terms and conditions shall be specified in the lease agreement.

9.6.8 Lease Agreement

If the lease application is approved by the Board, the terms and conditions of the lease of District owned open space shall be reduced to a lease agreement to be executed by the Chairman of the Board and the lessee on final approval of the lease.

9.6.9 Additional Provisions

The Board may prescribe such other terms, conditions or provisions of the lease agreement as it shall deem necessary should the Board elect to approve of a lease application.

9.6.10 Second Public Hearing

After a lease application has been approved by the Board, and a lease agreement has been prepared reflecting all of the terms, conditions and provisions of the Board's approval of an application for lease of District owned open space, the lease agreement shall be scheduled for a second public hearing before the Board at its regularly conducted monthly general business meeting. The second public hearing before the Board to review and approve of the proposed lease agreement shall be scheduled within nine (9) months of the hearing at which the Board approves of the lessee's application. Failure to obtain approval of a lease agreement within nine (9) months of the date of the approval of the application for lease of open space shall result in an automatic revocation of the Board's previous approval of the open space lease application. In such event, and should the applicant for a lease of open space desire to proceed, a new application shall be submitted for review and consideration by the Board in compliance with this policy.

At the second public hearing, the Board shall take additional public comment and shall vote to approve or disapprove of the lease agreement.

## 9.6.11 Recordation

Upon final approval of a lease of District owned open space, the lessee shall be responsible for the preparation and filing of any map or maps required to carry into force and affect the order approving of the lease. For example, if a map indicating adjusted lot lines is required to be filed for record, the lessee shall prepare the map and cause it to be recorded.

Further, any order of the Board approving of a lease application, together with the lease approved by the Board, must be recorded in the Office of the Douglas County Recorder if all of the conditions of the Board's approval and order have been fulfilled.

### 10.0 GENERAL PROVISIONS

### 10.1 Severability

It is declared to be the intention of the District that the sections, paragraphs, sentences, clauses and phrases of these Policies and Procedures are severable, and if any phrase, clause, sentence, paragraph or section of these Policies and Procedures is declared unconstitutional or invalid by the valid and final judgment or decree of a Court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of these Policies and Procedures.

## 10.2 Words and Phrases

For the purpose of these Policies and Procedures, all words used herein in the present tense shall include the future; all words in the plural number shall include the singular number; and all words in the singular number shall include the plural number and all words in the masculine sense shall include the feminine.

## **10.3 Business Impact Statements**

In compliance with AB 486 of the 1999 Legislative Session, now codified as NRS 237.030 through 237.110, the Board adopts the following guidelines relating to proposed Rules of the District and business impacts.

### 10.3.1 Definitions

- 10.3.1.1 Business: Business means any trade or occupation for profit.
- 10.3.1.1. Business Impact Statement: Business Impact Statement (abbreviated "BIS") is a statement prepared by District staff which must:
  - a. Describe how comments from businesses were solicited and describe those comments;
  - b. Describe the economic effect of the proposed Rule including adverse, beneficial, direct and indirect effect;
  - c. Describe methods considered to reduce the impact on businesses and state whether any of these methods will be used;
  - d. State the estimated costs to enforce the proposed Rule;
  - e. If the Rule provides a new fee or an increase in an existing fee, state how the amount of money will be raised and the manner in which it will be raised;
  - f. If the proposed Rule includes provisions that duplicate or are more stringent standards are necessary.

- 10.3.2 A proposed form of Business Impact Statement is set forth in Appendix G "Forms" of this Manual.
- 10.3.3 Direct Burden / Restriction: Before the Board adopts any ordinance, regulation, resolution or other instrument in the exercise of its legislative powers (except where exempted by the Act) the Board must determine whether the proposed Rule will:
  - a. Impose a direct and significant economic burden on a business; or
  - b. Directly restrict the formation, operation or expansion of a business.

If a proposed Rule meets either of the above-stated tests, the Board deems such a Rule as having a "significant business impact".

- 10.3.4 If it is determined that the proposed Rule imposes a direct and significant economic burden on a business or directly restricts the formation, operation or expansion of a business, the Board shall request its General Counsel or District Manager, or Staff to:
  - a. Consult with appropriate trade organizations, associations or owners and officers of businesses that are likely to be affected by the proposed Rule;
  - b. Consider methods to reduce the impact on business by simplifying the proposed Rule, including by simplifying the Rule, establishing different standards of compliance, and reducing any fee or fine established in the Rule;
  - c. Prepare a BIS and make copies available before the hearing on the Rule is held. If possible the BIS shall be made available to the general public two weeks before the hearing during which the proposed Rule will be discussed;
  - d. Schedule a hearing on the adoption of the Rule; and
  - e. Place the BIS before the Board for consideration of determination that either the Rule does impose a significant economic burden or that the proposed Rule does not impose a direct and significant economic burden.
  - 10.3.4.1 Whether or not a finding of significant business impact is made by the Board, the Board shall place on its agenda prior to the adoption of the proposed Rule discussion and possible action on the BIS. After the BIS has been acted upon, the Board shall schedule a public hearing on the proposed Rule.
- 10.3.5 The Board may elect, at the time it moves to approve its agenda, to adopt a blanket motion governing the entire meeting agenda, including any proposed Rule set for hearing on that agenda, which motion will be to the following effect:

"By moving to approve the agenda, the motion includes ratification of staff action taken pursuant to NRS 237.030 to NRS 237.110 with respect to items on this evening's agenda and determines that each Rule (as defined in NRS 237.060 and the District's Manual) which is on tonight's agenda for which a BIS has been prepared does impose a direct and significant economic burden on a business or directly restricts the formation, operation or expansion of a business, and each Rule which is on tonight's agenda for which a BIS has not been prepared does not impose a direct and significant economic burden on a business or directly restrict the formation, operation or expansion of a business."

- 10.3.6 Appeal. If a business believes it is aggrieved by a proposed Rule (as defined in NRS 237.060 and the District's Manual) adopted or to be adopted by the Board, the business may object by filing a petition in writing with the District Secretary.
  - 10.3.6.1 The District Secretary will accept such petition (s) on behalf of the District for a period of thirty (30) days following approval of the subject Rule by the Board. An appeal pursuant to this section must be based upon one or both of the following:
    - 10.3.6.1.1 The District failed to prepare BIS as required pursuant to NRS 237; or
    - 10.3.6.1.2 The Business Impact Statement prepared by the District did not consider or significantly understand the economic effect of the Rule on business.
  - 10.3.6.2 Upon receipt of a petition, the District Secretary will forward a copy of the appeal to general counsel for the District and to the District Manger.
  - 10.3.6.3 Staff will consider the merits of the petition and forward a recommendation to the Board.
  - 10.3.6.4 At a public hearing, the Board will determine if the petition has merit and direct staff accordingly.
  - 10.3.6.5 To be considered by the District staff or the Board, an appeal shall be the form of a Petition Objecting to Adoption of Rule as set forth in the Manual's Appendix G "Forms".

## 11.0 PARKS AND RECREATION

#### 11.1 General

#### 11.1.1 Open Hours

District Parks are open daily for public enjoyment from sunrise to one hour after sunset. In addition to the general use and enjoyment of the park by the public for recreational purposes, the parks are available on a first come, first served basis for most reserved uses, including but not limited to: general recreational use, special events, meetings, and exhibitions. However, organized sports league use for games or practices is not permitted.

#### 11.1.2 Closures

At the sole discretion of the District Manager, District parks, amenities or specified areas may be closed to the public during normal hours of operation for any reason for the convenience of the District. Reasons for closures may include, but are not limited to, safety, preservation of landscaping, protection of athletic field conditions, construction, and performance of maintenance/repair work. The District will post closure notices and the District will attempt to contact or provide contact information to persons with reservations that are affected by such closures.

#### 11.1.3 Entry Prohibited

No person or persons are allowed in District parks after designated hours of operation or during any closure, except the hours expressly included in a reservation issued by the District.

#### 11.1.4 Alcohol

It is unlawful for any person to consume or possess any beer or any alcoholic beverage within District parks, amenities or facilities, unless expressly allowed in writing as part of a reserved use.

11.1.5 Public Use Subject to Reservations

When a District park, any amenity or area within a District park is reserved the park, amenity or area will not be open to the public during the reserved park, amenity or area. Any person or entity that has reserved a District park or any amenity or area within a District park may exclude the public from the reserved area and may request assistance from the District in doing so. The area will be considered reserved if an approved reservation has been obtained from the District. Reservations will be posted at the reserved park and a posted at the District office.

#### 11.1.6 Unimproved Open Space

Unimproved Open Space is not covered by this policy.

# 11.1.7 Security

The District does not provide security at any District park.

# 11.2 Park Use and Reservation Policy

### 11.2.1 Park Use and Reservation Policy

The Board of Trustees ("Board") of the Gardnerville Ranchos General Improvement Mitch Park, including the pavilion and related public facilities, and the requests for public and private exclusive use of Mitch Park and/or other parks within the District, District park use requires a reservation policy for all persons desiring to use, promote, encourage or sponsor activities within District parks regarding reservation of District parks.

The Board will for events within District parks allow for a public or private group or person to reserve parks for such use, for limited amounts of time, pursuant to this policy and the following rules and regulations.

No person or entity shall use District parks without compliance with this Park Use and Reservation Policy ("Policy"). Any person desiring to use a District park for an event must first apply to the District office for a permit issued by the Board for the conduct of the event within the park. Any completed application will be placed on the next available Board agenda for consideration and possible approval by the Board after its review and approval by the District Manager ("Manager").

#### 11.2.2 Board Findings

The Board has found that certain activities to be conducted within District parks should be subject to a park reservation fee based upon the following findings:

- a. Youth activities are to be supported and subsidized to ensure an open and inviting park-use environment. The District will not charge a fee for youth activities except for minimum fees necessary for security and/or cleaning of District park facilities.
- b. Adult activities are also to be supported, but are subject to fees based on a greater ability to support and pay for use of District parks.
- c. Youth-oriented community organizations should be allowed to maximize fund-raising efforts in support of a non-profit youth activity organization.
- d. All requests are subject to the District Manager's priority ranking to ensure reservation of District parks. Deposits and insurance requirements will be required according to the schedule set forth in this Policy to ensure continuing availability and security of District parks.
- e. Deposits and insurance requirements will be required according to the schedule set forth in this Policy to ensure continuing availability and security of District Parks.

- f. Additional fees may be charged beyond the minimum fees, at the discretion of the District Manager, when the impact on the District in accommodating the park use is beyond normal operations, such as District staff overtime and cleanup costs.
- g. Uses of District parks which are for commercial purposes, or other uses creating major impacts on the park facilities, will be reviewed by the Manager on a case-by-case basis. The Manager's recommendation shall be provided to the Board prior to approval of such park use.

## 11.2.3 Definitions

An application for District park use, which may or may not involve the entire District park facility, shall be construed as a use of that portion of the District park to the exclusion of all other public and private users for the reserved period of time ("use" or "park use"). Park use shall be arranged by the Manager according to this policy. A park use includes any event conducted within a District park, whether organized or promoted for commercial purposes or non-commercial purposes, whether or not an admission fee or donation is requested or required, and shall include any exclusive use of a District park.

A use of the park includes the park and all of its facilities. Where applicable, the District's template for location of temporary facilities, such as booths, shall be utilized.

#### 11.2.4 Permit Required

No person or entity shall be entitled to reserve any area or the entire area of a District park for the operation, maintenance, conduct, or advertisement of any activity, or advance ticket sales related thereto, unless a permit from the District is first obtained by submitting an application, described below, to the District and the Board, and the Board approving such application.

#### 11.2.5 Priority of Uses

The Board establishes, in the first instance, that reservation of District parks shall be on a first come, first served basis. If an application is received, reviewed and approved, the application to use a District park shall take precedence over any other applications even if a later received application requests use of the park for the same time period.

For applications received, but not yet approved, that request the same period of time of use of a District park, then park use will be based on a priority pursuant to the Board's findings and the following priorities:

- a. District-Sponsored Activities
- b. Student groups sponsored by the Douglas County School District
- c. Youth, family or adult community recreation activities open to the public sponsored or conducted by a recognized community organization
- d. Governmental agency meetings open to the public
- e. Douglas County-based groups or individuals conducting activities restricted to members of the group or entity, and are otherwise closed to the public
- f. Religious, sectarian or political meetings
- g. Commercial uses for financial gain

- h. Out-of-county group or organizational uses
- 11.2.6 Application

A completed "Reservation Form and Release of Liability and Indemnification Agreement" ("application") for use of a District park to conduct an activity or event, which may or may not involve the closure of a street or alleyway within the District, must be submitted in writing to the District at least 10 business days prior to the next Board meeting preceding the time indicated for the commencement of the planned use which shall be accompanied by any fees and/or deposits established or required pursuant to this Policy. The following information related to the specific use shall be contained in the application prior to its submission to the District.

- a. The name, age, residence and mailing address of the person or entity making the application. If the application is made by an entity, the names and addresses of the principals of the entity must appear. Where the applicant is a corporation, the application must be signed by the president, vice-president and secretary of the corporation and must contain the residence addresses of the corporate officers and a certified copy of the Articles of Incorporation as a part of the application.
- b. A statement of the kind, character or type of use which the applicant proposes to conduct, operate or carry on, and the name(s) of the street(s), park(s) or alleyway(s) within the District for which permission to close such street, park or alleyway is sought.
- c. The home, office and/or work telephone numbers of the applicant, and if the application is by an entity, the home, office and/or work telephone numbers of the principals. If the application is made by a corporation, the home, office and/or work telephone numbers of the president, vice-president, and secretary shall be supplied.
- d. The date or dates and hours during which the use is proposed to be conducted.
- e. An estimate of the number of patrons, customers, spectators, participants and/or other persons expected to attend the use for each day it is proposed to be conducted.
- f. If applicable, proof that the applicant is seeking, or has sought and received the requisite approvals and/or permits from Douglas County, including, without limitation, and if required, a liquor license and/or an outdoor festival and entertainment event license, and that the applicant has received any and all other approvals and/or permits from Douglas County. Failure to submit the requisite proof of Douglas County approval(s) and/or permits shall be deemed to be an automatic determination that the application is incomplete, and shall not be heard by the Board until complete.
- g. Where applicable, if an application proposes the erection of temporary facilities to be used for the event to be conducted in the District park, the application shall utilize the District's template for location of temporary facilities, such as booths, and demonstrate to the satisfaction of the Manager that all temporary facilities are located in conformity with the template.
- h. The Board may, in limited and special circumstances, waive any fee(s) and/or deposit(s) required by this Policy, provided that the applicant has complied with all other requirements

of this Policy, and provided that any such waiver of fees or deposits was approved at a Board meeting complying with NRS Chapter 241.

### 11.2.7 Insurance

As part of the application, each applicant shall supply proof of insurance as required below, unless the applicant is a local government entity sharing the same liability insurance as the District, in which latter instance District staff shall verify the status of the local government entity and the liability insurance of such entity. Subject to the immediately preceding sentence, comprehensive general liability insurance naming the District as an additional insured and certificate holder with minimum limits of insurance of \$1 million for each occurrence and \$1 million annual aggregate will be required for any District park use when 1) the event is open to the public; 2) a fee is charged; 3) the very nature of the event and/or the number of applicants require(s) liability insurance; 4) alcoholic beverages are to be sold; and/or 5) as recommended by the District Manager to the Board and/or as determined by the Board. Insurance coverage must include premises, operations, products and completed operations, at a minimum.

## 11.2.8 Explanation of Use

Included with the application shall be a detailed explanation of the applicant's plans to provide security and fire protection, water supply and facilities, food supply and facilities, sanitation facilities, medical facilities and services, vehicle parking spaces, vehicle access and onsite traffic control, and what provision shall be made for numbers of participants in excess of the applicant's estimated attendance. The applicant shall also provide for cleanup of the premises and removal of garbage and refuse at the District Park after the event has concluded.

#### 11.2.9 Time of Operation

- a. All park uses which are the subject of this policy are available for individual or group use during normally scheduled hours of operation. Exceptions are subject to review by the Manager and review and approval by the Board. Additional hours of operation may be allowed and approved by the Board.
- b. No group or individual may reserve a District park more than four times per month, two of which may be weekends, including Friday, Saturday and Sunday. Additional use beyond these periods shall be subject to the regulations set forth in Paragraph c below.
- c. Extended park use involving multiple dates within a one month period may be granted for a maximum of one calendar year. All permits shall expire on December 31 of each year. District park use is subject to the priority ranking schedule of this Policy. Reservations may be cancelled for a full refund of fees and/or deposits up to 5 business days prior to the scheduled use. If a reservation is cancelled with less than 5 business days remaining prior to the scheduled use, no refund of fees will be given, except in extraordinary circumstances, extreme weather, natural disasters, or other acts of God, but any deposits made will be refunded.

### 11.2.10 Alcohol and Food

Should the applicant desire to dispense alcoholic beverages, or to permit the consumption of alcoholic beverages as part of a District park use, the applicant must request permission from the Board on the application. Only beer or wine may be consumed at an event and/or during a District park use. The applicant shall obtain any other permits required for the dispensing or consumption of alcoholic beverages, including but not limited to any liquor permits required by Douglas County, and proof of compliance with such permit requirements must be submitted with the completed application within the time for submitting the application as set forth in this Policy. The applicant shall ensure that no participant in the park use shall use or possess any liquid container made wholly or partially of glass or metal, and demonstrate, as a part of the application, the measures to be taken to restrict alcoholic beverage containers and to ensure that no alcoholic beverage will be consumed or dispensed outside of the area of the park.

# 11.2.11 Smoking Prohibited

Smoking is prohibited in the park except where specifically authorized.

# 11.2.12 Security/Law Enforcement Protection

Security and law enforcement protection may be required for certain uses of a District park, subject to the Board's discretion and the Douglas County Code. The Board shall consider the following when determining whether security and/or law enforcement protection is required: 1) where an event makes a major impact on a District park and/or District park facilities; 2) when alcohol is served; and/or 3) when additional precautions are deemed necessary due to the nature of the event. If required by the Board or by Douglas County Code, the applicant shall employ at his, their or its own expense, law enforcement protection or private security personnel. The number and type of officers shall be determined and specified by the Douglas County Sheriff's Office to provide for the preservation of order and protection of property in and around the park. If security and/or law enforcement protection is required, the applicant shall demonstrate to the satisfaction of the Board that the applicant has obtained the approval of the Douglas County Sheriff of all arrangements for security for the District park use. The applicant shall be responsible for all costs of security which shall be determined by, and paid to, the Douglas County Sheriff's Office or its designee, or to a private security firm if applicable. Security shall be subject to the complete direction and control of the Sheriff's Office.

# 11.2.13 Sanitation Facilities

The park facilities include limited sanitation facilities. The applicant shall comply with the Douglas County Code and Nevada Administrative Code 444.825 regarding providing toilet facilities, which may include, but is not limited to, providing enclosed portable chemical toilets or enclosed flush type water closet facilities, marked "Men" and "Women" as

appropriate, the type and quantity of such toilets and/or facilities to be determined by the District Manager and approved by the Board pursuant to Nevada. At least one sanitation facility shall be handicapped accessible and meet the requirements of the Americans with Disabilities Act as amended.

Every applicant shall be required to provide for solid waste disposal. All solid waste disposal shall be provided by the District or their designee which, based upon the application, shall determine the number and type of containers, and pickup and removal of refuse, trash, garbage and rubbish, subject to Board approval. Removal of all trash and refuse shall be at the applicant's expense.

The applicant shall provide adequate assurance to the Board that, at the conclusion of the use, the park shall be cleaned, and all refuse and garbage removed within twenty-four (24) hours of the time of the conclusion of the use.

## 11.2.14 Cleaning and Security Deposit

A cleaning and security deposit ("deposit") of \$300.00 will be required to be paid upon submission of each application. The \$300.00 deposit applies one time to one event, so that if an applicant is also applying for a District street closure and/or special event permit, only one \$300.00 cleaning deposit shall be paid per event. If the application is denied by the Board, the deposit will be refunded to the applicant within 30 days of the application being denied.

Upon recommendation by the District Manager, the deposit may be waived subject to the Board's discretion, and based upon the use proposed and the Board's consideration of the matters set forth within a completed application, including, without limitation, the planned use, the number of attendees anticipated, whether or not alcohol will be dispensed or consumed, the hours of operation, and the sanitation facilities required. Even if the Board waives the deposit, the applicant may be responsible for payment of cleanup and/or other expenses as set forth in the Policy if such expenses are necessary after the applicant's use.

The deposit, once paid, may be refunded to the applicant, in whole or in part, subject to the Board's discretion, at the conclusion of the District park use after inspection by District staff for any additional clean-up and/or damages other than normal wear and tear. Cleanup by District staff will be billed at \$25.00 per hour and will be deducted from the deposit, with any remaining portion of the deposit refunded as consistent with this Policy. The applicant will remain responsible for any additional damages or repair expenses as a result of the use. A full or partial refund of the deposit, if the District Manager determines it is due, will be returned to the applicant within thirty (30) days of the park use.

If the application is approved, prior to the event the applicant will be given instructions for cleaning the District park to be used. An applicant shall clean the District park to be used after the event. If, after the event has concluded, additional cleaning is required, it will be provided by the District, which will bill at the rate of \$25.00 per hour as described in the paragraph immediately above.

### 11.2.15 Damage to Facilities

Any applicant whose use of the park causes damage or excessive wear and tear to the park or its fixtures shall be required to reimburse the District for all costs to repair, replace, restore, repaint or clean up the affected area to its original condition prior to the use. Any damage caused by a park use beyond normal wear and tear shall cause any future application submitted by the same person or entity to be reviewed to determine if the applicant will be allowed to use the park and its facilities in the future.

## 11.2.16 Reservation Fee

A basic reservation fee at the rate of \$25.00 per hour, up to \$300.00 maximum per day ("basic rate") is established by Board. At the time an applicant submits the completed written application, the District Manager shall require a reservation fee based on the basic rate, the proposed use and classification of uses set forth below, and the proposed length of time of use, subject to final approval of the Board. The reservation fee set forth in this paragraph does not include the cleaning and security deposit described above.

# 11.2.17 Classification of Uses and Charges

When two or more applications for use of a District park are received by the District, and each requests use of the park for the same time period, approval of an application for the requested time period shall be based upon the following classification of uses.

No application to use a District park for a period of time shall be granted by the District if the Board has previously approved an application for use of the park during the same period of time. The District Board's policy is that the classification of uses established in this section of the Policy is to be applied when two or more applications are received, and each requests use of the park for the same period of time.

- a. Class I: No fee (0% of basic rate)
  - i. Non-profit county youth groups when the activity is open to the public for activities and meetings for recreational purposes.
  - ii. Groups or community organizations providing adult or youth group recreation activities which are free and open to the public.
  - iii. All governmental meetings and fund-raising activities sponsored by a government agency when a reciprocal agreement exists with the governmental applicant.

Class I users include, without limitation, county youth groups or agencies serving youth which are non-profit, tax exempt or not-for-profit activities whose primary purpose is to provide for recreation for Douglas County residents. A majority of participants must be Douglas County residents. Any fee charged for the activity must be used for the support of the activity. For governmental agencies, the fund-raising activity must relate to its governmental operations.

b. Class II: One-half (50%) of basic rate

Recreational or charitable fund-raising activities for local, community youth serving groups and non-recreational groups when all funds raised support community, charitable and/or recreational activities.

This rate pertains primarily to fund-raising activities by county community organizations and youth serving agencies in support of recreation and/or community activities. Fund-raising activities must have as a main purpose the generation of funds to support the youth or community activities.

c. Class III: 100% of basic rate

Groups included within this classification are religious, political or union groups conducting meetings; private parties, individual uses and family uses which are not open to the general public; and closed and open dances and fund-raising events where the funds which are raised are not used to support a community or local recreational activity.

Class III uses are usually with private functions and are not open to the public, including private parties, individual uses and family uses. Class III includes community organizations where the event will not generate funds for the organization or will not be open to the public.

d. Class IV: 100% of basic rate plus 25% of gross receipts

Class IV uses will include commercial or personal use of the park for financial gain.

The full basic rate plus 25% of gross receipts received by applicant during the applicant's use of the District park and for the specified District park use.

Class IV includes a significant activity whose purpose is a commercial use and/or which constitutes a major impact upon the public. Any request for a Class IV use must be approved by the Board, which may review, among other factors, the nature of the profit-making organization, company or enterprise.

The Board's policy is that, for competing applications for the same period of time, the Manager shall rate the competing applications based upon the classification of uses set forth within this section so long as no other approved application has requested use of the park for the same period of time.

# 11.2.18 Additional Charges

Additional charges may be levied over the basic rate charged when any one or more of the following occur:

a. When the facility would not normally be open and District staff are required to be on duty or to perform a service.

- b. When the applicant requests District staff to assist in set-up, breakdown, clean-up, park preparation or other maintenance duties when required during other than normal operating hours.
- c. When District staff are required for control of the event.
- d. When the proposed use requires park renovation or facility repair as a result of the proposed activity.
- e. When damage to the park and its facilities is reasonably foreseeable, or has occurred, and includes without limitation all material costs, supplies and labor.

The determination of requirements for additional charges shall be made by the Manager. The applicant will be charged at the rate of \$25.00 per hour when use of District staff is required, such use as determined by the Manager.

A total of the basic rate and any additional deposit, as required by this Policy, shall be paid in full at the time of the submission of the application. In no event shall any fee or deposit required by the District be paid later than 10 business days prior to the date of the event. If the fees are not paid in full prior to 10 business days prior to the event, the permit shall be revoked.

## 11.2.19 Refunds

Any applicant may cancel an application prior to its approval and receive a full refund minus a \$25.00 administrative fee.

An approved applicant may cancel its reservation 5 business days prior to the event with a full refund of the reservation fee minus a \$25.00 administrative fee. In the event an applicant cancels its reservation for District park use at any time prior to the event, the cleaning and security deposit will be refunded regardless of when the cancellation is made.

If an approved applicant cancels its reservation less than 5 business days prior to the event, the reservation fee will not be refunded, except in extraordinary circumstances, extreme weather, natural disasters, or other acts of God.

A cleaning and security deposit of \$300.00 is set forth in Section 14 above. Deposits may be refundable subject to the terms of this Policy.

### 11.2.20 Miscellaneous Park Use Rules

Street Closures or Special Events: The applicant shall also comply with the District Manager's directives regarding street closures or special events.

Dumpster Fee and Litter: The applicant will be charged a fee of \$25.00 per garbage dumpster for groups of 50 or more people. Litter must be placed in appropriate garbage

containers and/or wastebaskets and/or removed by park users from the District park being used.

Winter Restroom Use: The applicant will be charged \$50.00 if park restroom use is required from the time period of the day immediately after Thanksgiving until March 31 of the next year.

Damage or Destruction of District Property: No person shall intentionally damage, destroy, remove or modify any District property. No person shall operate any vehicle, including but not limited to motorcycles, all-terrain vehicles, dune buggies, or other motor vehicles, within a District park, except on designated paved roads. Vehicles may not be driven on any lawn or surface other than the designated parking areas without the express permission of the Board and as recommended to the Board by the District Manager.

Music: The Board must authorize any amplified music.

Tents, Canopies, Awnings, etc.: The Board must authorize the erection of tents, canopies, awnings, or other like structures. Bounce houses, dance floors, or tents larger than 20 ft. by 20 ft. may be subject to additional security deposits and/or insurance coverage, at the discretion of the Board and as recommended to the Board by the District Manager. Stakes are not permitted for use in securing tents, etc.

Signs: Signs are not allowed within the park without the express permission of the Board and as recommended to the Board by the District Manager.

Dogs: Dogs, except seeing eye guide dogs, police dogs or service dogs, are allowed in District parks only if they are wearing a collar and restrained, under the owner's control, by a leash not greater than eight feet (8') in length. The Board may allow other animals in District parks when part of an event at its sole discretion.

Hunting, Trapping, and/or Fishing: Hunting and trapping in District parks are strictly prohibited. Fishing is not permitted, except in areas specifically designated for that use in the manner provided for. All fishing is subject to and in conformance with Nevada Revised Statutes and Nevada Division of Wildlife regulations.

Firearms, Crossbows, Air Rifles, and Fireworks: The discharge of firearms, crossbows, air rifles or fireworks is strictly forbidden.

Camping: Camping is not permitted in District parks.

All Other Laws: An applicant requesting to use a District park for an event is responsible for complying with all federal, state, and county laws and ordinances, including the Nevada Revised Statutes, the Nevada Administrative Code, and the County Code for Douglas County, Nevada ("Douglas County Code"). This includes but is not limited to any outdoor festival permits, liquor licenses, etc. required by the U.S. government, the State of Nevada, Douglas County - Nevada, or DISTRICT.

The District shall provide a copy of this Policy to the applicant at the time of furnishing an application.

# 11.3 Open Space Rules

11.3.1 The following rules were made by the Board of Trustees of the Gardnerville Ranchos General Improvement District to promote District owned Open Spaces as recreation areas for adults and children.

- a. The primary reason for open space is to have an area for adults and children to play closer to their homes.
- b. To promote safety with the Open Spaces, no motorized vehicles of any kind will be permitted with District owned Open Space.
- c. There will be no dumping of any type of material for any length of time within District owned Open Space.
- d. There will be no open fires of any kind allowed within District owned Open Space.

# APPENDIX A STREET CUT POLICY AND DETAILS

# A.1 PERMIT POLICY

A Street Cut Permit is required for any work which involves excavation, filling, and/or replacement of asphalt concrete roads in any dedicated right-of-way or easement. A basic permit fee of \$250 will be charged for all Street Cut Permits.

# A.2 EARLY STREET CUT FEE

In addition to the basic permit fee, an early Street Cut Fee is assessed when an opening is made in any street on which the surfacing is less than five (5) years old. The early Street Cut Fee is five percent (5%) of the patch cost for each unelapsed month, or fraction thereof, of the five year restricted period. The patch cost is calculated as follows:

Patch Cost = Patch Area, Square Feet x \$5.00 Patch Area = (Trench Length, feet + 4.0 feet) x (Trench Width, feet + 4.0 feet)

# A.3 SECURITY DEPOSIT

The Permittee is required to place a refundable security deposit or other approved security equal to \$3.00 per square foot of patch area to be returned upon satisfactory completion of the pavement repair. The patch area will be calculated as follows:

Patch Area = (Trench Length, feet + 4.0 feet) x (Trench Width, feet + 4.0 feet)

# A.4 PAVEMENT REPAIR

All pavement repairs shall comply with the Gardnerville Ranchos General Improvement District Typical Asphalt Concrete Pavement Repair Details and the Standard Specifications for Public Works Construction (1992). The surface of pavement repair shall match the existing pavement surface.

The Permittee shall replace all removed paving daily with cold mix patch material and shall place the final paving course within seven (7) days after completion of the work. The Permittee shall be responsible for maintaining the repair area for one year after completion of the work. In the event of settlement in the area of the repair, or other failure such as cracking or loss of repair material, the District may require the Permittee to repatch the area. If the Permittee fails to repatch the area, the Permittee shall pay the District for actual and related indirect costs incurred by the District in performing the replacement or repairs.

# A.5 WORKING WITHOUT A PERMIT

The basic permit fee and applicable early street cut fee shall be double the amount in the event that work of excavation, filling and/or replacement begins prior to obtaining a Street Cut Permit.

# A.6 TRAFFIC CONTROL

Permittee is responsible for providing and maintaining barriers, barricades, lights, warning flags, and danger signs necessary for the protection of both vehicular and pedestrian traffic as prescribed by the Nevada Work Zone Traffic Control Handbook.

Contractor is responsible for keeping materials neatly along the side of the trench so as to cause as little inconvenience as possible to public travel and to eliminate safety hazards.

Unused materials shall be removed by the contractor immediately upon completion of the work.

No excavations shall be left open overnight.

# A.7 INSPECTION AND TESTING

All backfill, aggregate base and asphalt concrete shall be inspected and tested in accordance with the Standard Specifications for Public Works Construction (1992). Permittee shall notify District at least 48 hours prior to any testing. Testing will be paid by District. However, all failing tests or tests which indicate non-compliance with the Standard Specifications for Public Works Construction (1992) will be billed to the Permittee. If Permittee does not pay costs for failing tests, District shall have the right to deduct testing costs from Permittee's security deposit.

# APPENDIX B WATER RATES, FEES AND CHARGES

# B.1 WATER RATES

- B.1.1 Water rates for all classes and types of use may be changed and set by Resolution of the Board. Changes in water rates shall be adopted by the Board after due public notice is given by publication in a newspaper of general circulation in Douglas County and approved by the Board.
- B.1.2 All Metered users shall be charged in accordance with the following schedule:

# 1) Minimum Service Charge

For in-District metered properties connected to the District's water system, the minimum charge for service through any service connection line size shall be:

Effective 01-01-06 \$21.50 per month

For out-of-District properties connected to the District's water system, the minimum charge for service through any service connection line shall be:

Effective 10-01-00 \$33.00 per month

The minimum service charge shall be collected together with any additional consumption charge set forth in paragraph B.1.3.2.

# 2) Additional Consumption Charge

For each 1.000 gallons of water consumed per month, as shown by the Customer's water meter, the consumption charge shall be as follows:

<u>Use (Gallons)</u>	<u>Charge</u>
0-10,000	No charge (covered by Service Charge)
10,000-Up	\$0.90 per 1,000 gallons

# 3) Unit Charge, Where Applicable

For each unit in excess of one (1) unit served from a single metered service connection, the unit charge shall be \$21.50 per unit.

B.1.4 The rates for Temporary Water Service shall be as set forth in Section B.1.3.

# B.2 CONNECTION FEES

B.2.1 The base fee for a service connection to District facilities shall be as follows:

Service Size	Connection Fee
3/4"	\$4950.00
1"	\$8250.00
1 1⁄2"	\$16500.00
2"	\$26400.00
2 1⁄2"	\$29600.00
3"	\$52800.00
4"	\$82500.00

B.2.2 The base fee for a service connection to District facilities for standby fire protection shall be \$750.00.

# B.3 INSTALLATION FEES

B.3.1 Initiation and re-initiation of voluntarily disconnected services.

For voluntary disconnect or initiation of service to <u>any</u> customer, the District shall charge the Customer \$50 per connection for either replacing or reading a meter or turning on and off (or off and on) an existing installation.

For any connection in excess of 1", a charge to the Customer equal to the actual cost of the materials and labor of the District for such replacement or reading shall be paid.

# B.3.2 Reconnection.

In the event a service has been discontinued for non-payment of water bills or violation of the rules and regulations, reconnection at such existing installation to the same customer shall be subject to a charge of \$50 per connection.

For any connection in excess of 1", a charge to the Customer equal to the actual cost of the materials and labor of the District for such replacement or reading shall be paid.

B.3.3 Fee Adjustment for Time of Replacement.

The fees set out in subparagraphs B.3.1 and B.3.2 above are based upon reconnection during regular working hours. All requests for such reconnection shall be complied with during regular working hours, if possible on the day of the request. If reconnection is not possible on the day of the request, it shall be done during regular working hours of such new working day as conditions permit. In the event a request is made to reconnect service at other than regular working hours, the District will endeavor to make the reconnection if practicable under the circumstances, but is under no obligation to do so unless an emergency exists in the opinion of the District, and a reconnection shall be made at other than regular working hours only if the Applicant pays an additional fee equal to 1.5 time the normal fee for the particular service condition set forth in subparagraphs B.3.1 and B.3.2 above.

# B.4 TEMPORARY SERVICE FEES

An applicant for temporary service shall deposit, in advance, \$1,000 for a meter. If water service is supplied through a fire hydrant, the applicant will be charged in accordance with the following rate schedule:

Monthly charge per connection for both installation and removal of service facilities, including meter: \$75.00 per month or part thereof.

Water rates for temporary water service shall be as set forth in Section B.1.3.

# B.5 INSPECTION FEES FOR SERVICE CONSTRUCTION

The inspection fee for water service construction is included as part of the connection fee.

# B.6 INSPECTION FEES FOR LINE EXTENSIONS

The inspection fee for water line extensions shall be the actual cost of full-time inspection and testing.

# B.7 FIRE CONNECTION STANDBY FEE

The Fire Connection Standby fee shall be \$25.00 per month for each commercial hookup.

# B.8 LATE PAYMENT OR NON-PAYMENT FEE

A fee of five dollars (\$5.00) per month will be charged for any bills over thirty (30) days old.

#### B.9 BAD CHECK FEE

A one-time fee of thirty dollars (\$30.00) per check will be charged for any bad check.

#### B.10 INTENTIONALLY LEFT BLANK

# B.11 DEPOSIT FOR CONNECTION

A deposit in an amount of \$100.00 for a water service connection for the service(s) requested by a customer to ensure compliance with the District's rules and regulations. In District and out of District customers shall be required to comply with this requirement. All deposits collected in accordance with this Section shall be retained by the District for one year, and thereafter applied to future District service charges. No District required deposit shall bear interest to the benefit of the Customer.

The deposit required by the Section shall not be applied to service or other charges incurred during the first years' service(s) provided to a customer.

Alternatively, the District's Manager may waive the deposit by of customer of \$100.00 for water connection should the customer demonstrate that he or she has obtained good credit with other utilities.

All customers must comply with all rules and regulations of the District for a one year period prior to the application of the amount deposited to service or other charges incurred at the expiration of one year of service.

Should a customer default in compliance with the District's rules, regulations, policies or procedures after application and receipt of service(s) from the District, a one year period for retention of the deposited amounts will be calculated as of the date that the customer cures the default in the customer's compliance with the District's rules, regulations, policies or procedures.

The District may, in addition, terminate service to the customer who is in default in compliance with the District's rules, regulations, policies and procedures without regard to the time of occurrence of the default. Each default by a customer shall be evaluated by the Board and/or the

District's Manager, who shall consider, among other factors, the nature of the default and the efforts taken by the customer to cure the default.

# B.12 ADMINISTRATIVE FEE

If service is terminated due to non-payment, the District may elect to file a lien for monies owed to the District. If the District initiates a lien, the customer will be charged a \$50 administrative fee and actual cost required to file the lien, including attorney's fees. Additionally, fees associated with the reconnection of service may be assessed pursuant to Section B3.2.

### B.13 CHANGE OF OWNERSHIP

Should ownership of real property located within the District change, upon a request from the new owner for initiation of service, the District will charge an initiation fee pursuant to Section B3.1.

### B.14 RESIDENTIAL STANDBY FEE

In the event that a customer requests a voluntary disconnect of service or the District initiates an involuntary disconnect of service, the customer will be charged a "standby fee" in the amount of \$12.50 per month, or a prorated share of a month, until service is again provided by the District after proper request, and all applicable fees have been paid, by the customer for re-initiation of service.

# APPENDIX C SEWER RATES, FEES AND CHARGES

### C.1 SEWER RATES

- C.1.1 Sewer rates for all classes of users and types of use may be changed and set by Resolution of the Board. Changes in sewer rates shall be adopted by the Board after due public notice is given by publication in a newspaper of general circulation in the Town of Gardnerville and approved by the Board.
- C.1.2 Until further resolution of the Board the monthly sewer rates shall be as follows:

In-District customers connected to the District's sewer system prior to May 17, 1990: *Effective July 1, 2015*....\$16.00 per month / EDU

In-District customers connected to the District's sewer system after May 17, 1990 Effective July 1, 2015.....\$23.00 per month / EDU

Customers connected to the District's sewer system with a sewer lift station and annexed into the District will be charged the following monthly sewer rates, which rates include a \$5.00 monthly maintenance fee: *Effective July 1, 2015*.....\$28.00 per month / EDU

> All out-of-District customers connected to the District's sewer system: *Effective July 1, 2015\_\_\_\_\_\_\$36.00 per month / EDU*

Out-of-District customers in the Pump Station 1 service area shall also pay an additional \$5.00 per EDU monthly maintenance fee for Pump Station 1. The customer shall pay on a monthly basis.

# C.2 CONNECTION CHARGES

C.2.1 The District shall charge and the Customer shall pay a fee to the District solely for connecting Customer's property to the District's sewer system, which fee shall be separate and apart from costs of construction of private yard lines and house piping upon

the Customer's property, which costs of construction are the sole responsibility of the Customer.

C.2.2 The base fee for a sewer service connection to District facilities shall be as follows:

The following fees shall apply to any lot or parcel legally created within the District through Douglas County's land division process after March 6, 2013:

Category I:	\$2,200.00 per EDU
Category II:	\$6,300.00 per EDU:

Pump Station 1 service area \$6,300.00 per EDU plus \$1,728.00 surcharge per EDU

Total Amount: \$8,028.00 per EDU

In the event that any new lot or parcel is legally created within the District through Douglas County's land division process after March 6, 2013, from a legal lot or parcel existing within the District on or prior to March 6, 2013, the appropriate sewer service connection fees immediately above shall apply to any such new lot or parcel.

The following fees shall apply to any lot or parcel legally created within the District through Douglas County's land division process on or prior to March 6, 2013. Such fees shall apply until January 1, 2020, at which time the sewer connection fees set forth above shall apply.

 Category I:
 \$2,200.00 per EDU

 Category II:
 \$4,675.00 per EDU:

Pump Station 1 service area \$4,675.00 per EDU plus \$1,728.00 surcharge per EDU

Total Amount: \$6,403.00 per EDU

#### GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT POLICY AND PROCEDURES MANUAL

<u>**Out-of-District:**</u> Effective March 7, 2013, the following fees shall apply to any Out-of-District sewer connections utilizing District sewer services:

Out-of-District: \$6,300.00 per EDU

C.2.3 Payment: All sewer connection fees shall be paid in full to the District prior to physical connection of any property to the District's Sewer System.

### C.3 INSTALLATION FEES

C.3.1 Reconnection

In the event sewer service has been discontinued, payment and procedure for reconnection shall be as set forth in Section 2.4.2.2.4.

### C.4 INSPECTION FEES FOR SERVICE CONSTRUCTION

The inspection fee for sewer service construction is included as part of the connection fee.

#### C.5 INSPECTION FEES FOR LINE EXTENSIONS

The inspection fee for sewer line extensions shall be the actual cost of full-time inspection and testing.

#### C.6 LATE PAYMENT OR NON-PAYMENT FEE

A fee of five dollars (\$5.00) per month will be charged for any bills over thirty (30) days old.

#### C.7 BAD CHECK CHARGE

A one-time fee of thirty dollars (\$30.00) per check will be charged for any bad check.

# C.8 DEPOSIT FOR CONNECTION

A deposit in an amount of \$100.00 for a sewer service connection for the service(s) requested by a customer is required to be deposited with the District by the customer to ensure compliance with the District's rules and regulations. In-District and out-of-District customers shall be required to comply with this requirement. All deposits collected in accordance with this Section shall be retained by the District for one year, and thereafter applied to future District service charges. No District required deposit shall bear interest to the benefit of the customer.

The deposit required by this Section shall not be applied to service or other charges incurred during the first years' service (s) provided to a customer.

Alternatively, the District's Manager may waive the deposit by a customer of \$100.00 for a sewer connection should the customer demonstrate that he or she has obtained good credit with other utilities.

All customers must comply with all rules and regulations of the District for a one year period prior to the application of the amount deposited to service or other charges incurred at the expiration of one year of service.

Should a customer default in compliance with the District's rules, regulations, policies or procedures after application and receipt of service(s) from the District, a one year period for retention of the deposited amounts will be calculated as of the date that the customer cures the default in the customer's compliance with the District's rules, regulations, policies or procedures. The District may, in addition, terminate service to the customer who is in default in compliance with the District's rules, regulated by the time of occurrence of the default. Each default by a customer shall be evaluated by the Board and/or the District's Manager, who shall consider, among other factors, the nature of the default and the efforts taken by the customer to cure the default.

## APPENDIX D WATER USE RESTRICTIONS

### D.1 DECLARATION OF PURPOSE

- D.1.1 The Board of Trustees of the GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT recognizes that in certain years there may be a shortage of water WITHIN THE District's service area which requires the imposition of restrictions on use so that the District may provide adequate and equal amounts of water to its users.
- D.1.2 In order to assure that the District can provide adequate supplies of water to its users, the Board of Trustees may, after a declaration of water shortage is made as provided herein, additionally restrict the use of water for certain irrigation or household purposes, and limit the time within which water may be used for the purposes. In furtherance of that goal, the Board enacts these restrictions pursuant to its authority granted by NRS 318.144, NRS 318.145, NRS 318.170(d) and NRS 318.199.

#### D.2 DEFINITIONS

As used in the Appendix the following words or phrases are defined as follows:

- D.2.1 **"Board":** The Board of Trustees of the Gardnerville Ranchos General Improvement District.
- D.2.2 **"Declaration":** Means a declaration of water shortage by the Board when it appears to a majority of the Board that either insufficient water is available to meet the reasonable needs and requirements of the District, or that there is insufficient potable water for human consumption as determined by the Nevada State Health Department, the Douglas County Health Officer, or the District agent.
- D.2.3 **"District Agent":** Means the District's Manager, Engineer, Maintenance Supervisor, or a Board Member.
- D.2.4 **"User":** Means, but is not limited to, the record owner of the property or location as such owner is identified by the records of the Douglas County Assessor, or a tenant or other person residing, at, or on, such property. The land use classification (zoning) of a

property does not affect the application of these restrictions to all properties within the District's service area.

- D.2.5 "Water Uses": Water uses include the use of water for:
  - D.2.5.1 **"Household Purposes":** Means the purposes for which a person uses water inside a residence, and excluding all outside irrigation uses.
  - D.2.5.2 **"Irrigation":** Means, but is not limited to, irrigate, water, moisten, sprinkle, soak, waterlog, flow, wet or any supply of water to land by natural or artificial means for other than household purposes.
- D.2.6 **"Water Waste":** Means, but is not limited to, violation of these water use restrictions, or the careless consumption of water as evidenced by water overflowing or puddling on a property, or excessive runoff from any use of water on a property.

# D.3 EMERGENCY WATER USE RESTRICTIONS

D.3.1 Upon declaration by the Chairman of the Board, after a majority vote of the Board, taken at a regularly held meeting, at a specially called meeting, or in an emergency meeting after a telephone canvass of Board members by the District agent, the District may impose any or all of the following restrictions:

A) i) Require houses whose street address ends with an even number irrigate on even numbered days of the week; and
 ii) Require houses whose street address ends with an odd number irrigate on odd numbered days of the week; and
 iii) In months with a greater number of days than thirty (30), there shall be no irrigation permitted on the 31<sup>st</sup> day.

B) Require that irrigation be conducted, when permitted, during the hours of 7:00 p.m. to 10:00 a.m.

C) Prohibit the use of water for other than household purposes.

## D.4 NON-EMERGENCY WATER USE RESTRICTIONS

- D.4.1 Without declaration by the Board of a water emergency or shortage, in no event shall a water user irrigate or use water for other than household purposes between the hours of 1:00 p.m. to 5:00 p.m.
- D.4.2 In no event shall a water user waste water in violation of these restrictions, in using water for household purposes or irrigation, as water uses are defined in Section II hereinabove.

### D.5 EXEMPTIONS TO NON-EMERGENCY WATER USE RESTRICTIONS

D.5.1 The Board authorizes the District Manager, upon good cause shown, to exempt the following uses of water in non-emergency situations. The exemptions contained in this section do not foreclose the issuance of warnings or citations for water waste in violation of these restrictions.

A) Upon notice to the District by a property owner of lawns which have been newly planted within thirty (30) days.

 B) Professional gardeners or landscapers or users when performing services to install, repair, or maintain a sprinkler system or related mechanical devices.

C) Children's toys such as water slides and inflatable pools.

# D.6 PENALTIES

D.6.1 IT IS THE INTENTION OF THE BOARD OF TRUSTEES OF THE GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT THAT ANY AND ALL PENALTIES DELINEATED HEREIN SHALL BE PAID BY THE RECORD OWNER OF THE PROPERTY IN VIOLATION. ANY PENALTY AMOUNT SHALL, IN ALL CASES, CONSTITUTE A LIEN AGAINST THE PROPERTY UNTIL PAID. AN AGENT OF THE DISTRICT IS DIRECTED TO FILE OR RECORD ANY LIEN RESULTING FROM A VIOLATION OF THE PROVISIONS OF THESE RESTRICTIONS. D.6.2 Any user found by the agent of the District to be in violation of these restrictions, may, in addition to being subject to all rights and remedies of the District at law or in equity, be subject to the following:

A) Warnings: A user found to be in violation of the provisions of these restrictions shall be warned by the District agent, orally and/or by a citation in writing, of violations of these restrictions. A person warned of violation of the provisions of these restrictions on more than two occasions within a two year period shall be subject to the penalties contained in subsections B and C of this section.

i) It is the intention of the Board that violations shall be consecutive in nature during a two year period. The Board may not consider a violation which has occurred two years or more prior to the latest warning issued by the District for enhancement of the penalties provided for herein.

- B) Third Violation: On a third violation within a two year period a user found to be in violation of the provisions of these restrictions shall be assessed a penalty in the amount of Fifty Dollars (\$50).
- C) Fourth Violation: Mandatory Metering: A user found to be in violation of the provisions of these restrictions on a fourth occasion within a two year period shall be assessed a penalty in the amount of Fifty Dollars (\$50). If a water meter is installed by the District, the costs of the meter and the installation shall be billed to the owner of the property in violation, and shall be filed by the District as a lien of record against the property of the owner until paid. Thereafter, the account for the user at the location in violation shall be determined based upon the actual use of water as measured by the water meter installed. Any subsequent violation after a water meter is installed pursuant to this policy shall result in the assessment of a penalty in the amount of Fifty Dollars (\$50.00) for each violation.

D) Change of Ownership: An owner and/or occupant of a property found to be in violation of the provisions of these restrictions resulting in the installation of a water meter shall not be exempt from the requirements of these restrictions, and shall pay for water based on actual use of water as determined by the meter installed.

> i) If a water meter has been installed at a location which is subsequently sold, the water meter shall remain installed, and the property owner shall pay for water based on actual use of water as determined by the meter installed.

E) Consecutive Violations: Each and every violation of these restrictions is deemed to be a separate and succeeding violation.

D.6.3 Nothing contained herein shall prevent the District agent, without notice to any owner or occupant of a property, from entering a property to halt water waste. If entrance to the property is not reasonably possible, the District agent may cause water service to the property to be halted.

A) When it is reasonably determined that water waste results from a mechanical or other malfunction of the watering system located on the property, and upon adequate provision for the remedy of the malfunction, water service to the property shall be restored. In the case of water waste due to mechanical malfunction, a repair notice shall be issued to the user, property owner or occupant to remedy the malfunction within seventy-two hours. If the user, property owner or occupant neglects, refuses or fails to remedy the malfunction within seventy-two hours a citation shall be issued unless the District Manager, on sufficient cause shown, extends the period of time to repair a mechanical malfunction as in his discretion is appropriate on a case by case basis.

# D.7 APPEALS

D.7.1 Any person cited by a District agent in the enforcement of these restrictions may appeal such action to the District.

- D.7.2 An appeal may be taken by filing a written statement of the reasons why the agent of the District acted in error, and shall be submitted to the District Manager for review and possible action <u>within 30 days of the date the citation was written</u>. The District Manager or his designee is empowered to affirm, modify, or cancel any warning or citation issued, or penalty assessed. Should the District Manager deem it necessary, the District Manager may meet with the person appealing a warning or citation to discuss with the appellant the reasons for the appeal. At any such meeting minutes shall be taken of the conference between the appellant and the District Manager. At the conclusion of such meeting, the District Manager may act to affirm, modify or cancel any warning or citation issued.
- D.7.3 If the District Manager denies the appeal, the appellant may appeal that decision to the Board of Trustees within 45 days of the District Manager's decision. The appellant will submit in writing any new information they may have gathered and submit it to the District no later than 10 working days before the next Board Meeting of the Trustees. Prior to being placed on the Board of Trustees Meeting Agenda, all penalty amounts assessed for the third and/or fourth violations must be paid. A TWENTY-FIVE DOLLARS AND NO/100 CENTS (\$25.00) filing fee must be submitted at the time the appeal is filed with the District. If the Board of Trustees finds in favor of the appellant, the twenty-five dollar (\$25.00) filing fee will be returned as well as any penalty amount assessed for that citation.
- D.7.4 At the Board of Trustees Meeting, the appellant will present to the Board his/her reasoning why the appeal should not have been denied.
- D.7.5 The Appellant shall offer no new evidence except what was filed with the District Manager originally and any subsequent evidence prior to the meeting date as described in Section 3.

Revisers Note: Appendix D adopted November 1, 1994, RES. 94-1; §7: Appeals Revised May 3, 1995.

## APPENDIX E PROCEDURES FOR ANNEXATION

# E.1 DECLARATION OF PURPOSE

- E.1.1 The Board of Trustees of the GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT sets forth within this Appendix all existing procedures, policies and conditions of annexation to provide a single source for the District's annexation policy.
- E.1.2 In order to assure that the constituents of the District can fully comprehend the meaning of certain terms used in the annexation procedure, the Board hereby sets forth and establishes definitions of certain terms and procedures as they are used in the District's annexation procedure. (The definitions found herein may also be found in Section 1 of this Manual).

# E.2 DEFINITIONS

As used in these procedures the following words or phrases are defined as follows:

- A) "Acreage/Acre": Acreage or acre are synonymous. Acre may mean "gross acre" or net acre" unless otherwise stated within these procedures. The use of the term "acre" means "net acre" wherever used.
  - i) **"Gross acre"** consists of 43,560 square feet of land, and includes any public streets and alleys or other rights-of-way or easements.
  - ii) **"Net acre"** consists of 43,560 square feet of land, exclusive of any public streets and alleys or other rights-of-way, but inclusive of public utility, drainage, or irrigation maintenance easements.
- B) "Annexation": Annexation is synonymous with the term "inclusion". Annexation is defined to be that process by which the boundaries of the GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT are expanded to include certain properties currently within the District's service area as defined herein below. Upon the filing of an application followed thereafter by public hearing and an order by the Board accepting the property for inclusion within the boundaries of the District by the annexation process, the District may provide those services which it is enabled to provide by Ordinance Number

147 creating the District, to the extent that those services are now provided. Ordinance Number 147 was duly passed by the Board of County Commissioners of Douglas County on the 9<sup>th</sup> day of April , 1965, becoming in full force and effect from and after the 23<sup>rd</sup> day of April, 1965.

- C) "Annexation Map": Annexation Map shall mean a Record of Survey plat map which delineates and depicts the boundaries of the property approved for annexation. The annexation map shall be provided to the District by an applicant for annexation after approval of the application for annexation, but prior to the recordation of the order of annexation. The annexation map shall show the type of development and the planned density of the property annexed.
- D) "Annexation Fees": Annexation fees means the annexation fee paid to the District prior to the order of annexation being issued and recorded. Annexation fees shall also mean payment of all additional District legal, engineering, administrative and publication fees incurred in the processing of the application for annexation by the District prior to the order of annexation being issued and recorded. Annexation fees shall be applied on an acreage or parcel basis. Annexation fees applied on an acreage basis shall be based on the net acreage annexed.
- E) "Board": Board means the Board of Trustees of the GARDNERVILLE RANCHOS GENERAL IMPROVEMENTS DISTRICT.
- F) "Conditions of Annexation": Conditions of Annexation shall mean those standard conditions of annexation delineated in Section IV herein below, and shall mean such other special conditions as may be imposed by the Board on a particular property(ies) due to the unique characteristics of the property (ies) as set forth in the order of annexation.
- G) "Contiguous": A property shall be defined to be contiguous by the District if the real property is located within the service area of the District and the real property is capable of being serviced with the facilities of the District.

- H) **"District":** District means the GARDNERVILLE RANCHOS GENERAL IMPROVEMENT DISTRICT.
- I) "Family": One or more persons occupying a dwelling unit and living as a single, non-profit housekeeping unit,; provided that a group of four or more persons who are to related within the second degree of consanguinity shall be deemed to constitute a family. Notwithstanding the definition in the preceding paragraph, a family shall be deemed to include three or more persons not within the second degree of consanguinity occupying a dwelling unit and living as a single, non-profit housekeeping unit, if said occupants are handicapped persons as defined in Title VII of the Civil Rights Act of 1968 as amended by the Fair Housing Amendments Act of 1988. Such unrelated individuals shall have the right to occupy the swelling unit in the same manner and to the same extent as any family unit as defined in the first paragraph of this definition."
- J) "Improvement Plans": Improvement plans means a set of plans, in triplicate, depicting the intended off-site improvements for the property sought to be annexed. The improvement plans shall include all off-site improvements including streets, sidewalks, drainage, curbs and gutters, sewer improvements, water improvements, drainage improvements, and any other improvements required by the District or by Douglas County.
- K) "Land Uses": Land uses shall mean agricultural, commercial, high density residential, low density residential, or multi-family land uses as defined in this subsection.
  - "Agricultural": Agricultural or agricultural property shall mean any property sought to be annexed into the District which is to be used in any agricultural use under permit issued by the Douglas County Community Development Department.
  - "Commercial": Commercial or commercial property shall mean any property sought to be annexed into the District which is to be used in any commercial use under permit issued by the Douglas County Community Development Department.
  - iii) **"Residential":** Residential property shall be considered as high density residential property or low density residential property according to the following:

**"High Density Residential":** High density residential means any property which has been issued a permit for development for lot (s) of any area of less then 12,000 square feet per dwelling unit.

"Low Density Residential": Low density residential means any property which has been issued a permit for lot (s) with a minimum area of 12,000 square feet or larger per dwelling unit.

**"Multi-Family Residential":** Multi-family residential means any property which has been issued a permit for a building which is occupied or arranged, designed and intended to be occupied by two or more families, and contains more than one dwelling unit, but not including hotels, motels or boarding houses.

- L) "Large Project": Large project means any real property sought to be annexed into the District when the area encompassed by such property is five (5) gross acres or more in size.
- M) "Multi-Family":Multi-Family means any property containing a building which is occupied or arranged, designed and intended to be occupied by two or more families, and contains more than one dwelling unit, but not including hotels, or boarding houses.
- N) "Order": Order means the order of annexation or order for out of District services issued by the District after public hearing is held on the petition, approval of the petition is obtained from the Board, and after all of the conditions of the annexation are met by the applicant.

The order effectuating the annexation or approving of out of District services shall be issued and recorded only upon satisfactory compliance with all conditions of approval.

- O) "Out of District Services": Out of District services shall mean all those services customarily provided to properties within the boundaries of the District which are capable of being provided to properties which are not annexed into the District boundaries, but are within the District's service area. An application for out of District services shall comply in all respects with a petition for annexation, including written assent to future annexation of the property into the District, and a written waiver of protest to assessments for future extension of District services.
- P) **"Permit":** Permit means any permit, including a special use permit, issued by the Douglas County Community Development Department for an intended use of property.
- Q) "Petition": Petition means a petition or application for the annexation or inclusion of a parcel of real property within the boundaries of the District. Petition may also mean a petition for out of District service (s) to a property within the District service area, but not annexed within the District's boundaries.

A petition shall set forth an accurate legal description of the property owned by the petitioners, state that assent to the inclusion of such property into the District is given by all of the fee owners of such property who shall sign the petition, and the petition shall be acknowledged in the same manner required for the conveyance of land.

In the case of a petition for out of District services, the fee owner or owners shall also state in writing their waiver of protest to future assessments for future extension of District services.

When a petition is submitted to the District, it shall be submitted in triplicate for examination and review by the District Manager., the District Engineer and the District's attorney.

Petition is synonymous with application.

R) **"Service Area":** Service area shall mean the service area of the District. The Board hereby establishes the service area of the District as being that area bordered on the

west by Highway 88, bordered on the south by the United States Forest Service property, bordered on the east by the East Fork of Carson River, and bordered on the north by the proposed east/west extension of the Waterloo Lane alignment. The northeasterly border of the property is generally defined by the center line of the East Fork of the Carson River.

- S) "Services Authorized": Services authorized shall mean all those services which the District is authorized to provide to its constituents, including paving, the maintenance of streets, construction of curbs, gutters and sidewalks, and the maintenance of curbs and gutters, storm drainage, sanitary sewer improvements, water improvements, street lighting and garbage and refuse collection and disposal.
- T) "Services Provided": Services provided shall mean those services which the District currently provides to its constituents, including the maintenance of streets, curbs, gutters, storm drainage, sanitary sewer and water improvements and street lighting.

### E.3 ANNEXATION PROCEDURE

When a property owner desires to annex property within the District, and to have that property included within the District so as to receive the District's services, or when a property owner seeks to receive out of District service (s), the applicant shall apply for annexation or for out of District service(s) in the following manner:

- A) The fee owner or owners of any real property capable of being served with the facilities of the District, and located within the service area of the District, may file with the Board a petition in writing requesting that such property be included within the District, or be provided with District service (s) as an out of District property.
- B) The petition shall:
  - i) Set forth an accurate legal description of the property owned by the petitioners.
  - ii) State that assent to the inclusion of such property in the District is given by the singers thereto, who constitute all of the fee owners of such property.
  - iii) Be acknowledged in the same manner required for a conveyance of land.

- iv) In a case of petition for out of District service (s) the fee owner or owners of the property shall also set forth in writing that they waive their protest to assessments for future extension of District services.
- v) Shall state the permitted use(s) allowed by the Douglas County, Nevada Consolidated Development Code, and shall be accompanied by a copy of the issued permit for such use (s), if issued. If a permit has not been issued for such permitted use (s), the applicant shall submit to the District a copy of the permit issued by the Douglas County, Nevada Community Development Department within thirty (30) days of its issuance.
- C) There shall be no withdrawal of a petition after consideration by the Board nor shall further objections be filed except in case of fraud or misrepresentation.
- D) The board shall hear the petition at an open meeting after publishing the notice of the filing of such petition, and of the place, time and date of such meeting, and the names and addresses of the petitioners. The Board shall act to grant or deny the petition, and the action of the Board is final and conclusive. If the petition is granted to all or any of the real property therein described, the Board shall make an order to that effect, and file the order for record upon satisfactory compliance with the conditions of approval and these annexation procedures.
- E) After the date of the property's (ies') inclusion in the District, or after the date of the approval of out of District service(s), which date is hereby established as the record date for the order of annexation, or order for out of District service (s), the order shall be filed with the Offices of the Douglas County Clerk and the Douglas County Recorder, who shall be requested to file a copy of the order in their offices, and who shall also be requested to file an additional copy of the order in the Office of the Secretary of State, which filing shall be without fee and be otherwise in the same manner as articles of incorporation are required to be filed.
- F) No real property shall be annexed into the District, or provided out of District service (s), unless al of these procedures, District regulations, and the applicable provisions of NRS 318.010 "Improvement Districts" are met.

G) Should any property which has been the subject of a petition and an order subsequently be the subject of an application for a permit allowing a different use than that which has been submitted to the District at the time of the submission of the petition, which permit would allow a different higher density use, the fee owner or owners of such property, at the time of application for such use, shall be assessed the difference between those annexation fees previously charged for a lower density use, and those which would have been assessed if the property was annexed with a higher density use at the time of the annexation.

Any applicant for annexation of property shall consent in writing to the payment of additional annexation fees should the property be the subject of an application to reclassify and/or use the property as a higher density property. Such written promise shall be in writing, and in a form to be sufficient to be recorded as a notice to all subsequent purchasers that the property may be charged additional annexation fees pursuant to these procedures, and that such charge shall constitute a lien in favor of the District for additional annexation fees.

# E.4 CONDITIONS OF ANNEXATION

- A) <u>Standard Conditions</u>: The following standard conditions shall be met by the owner or owners of real property sought to be included within the District, unless a written waiver of a condition is approved, adopted and issued by the Board after public hearing of the petition:
  - i) Payment of District legal, engineering and publication fees.
  - ii) Construction of all improvements as shown on the proposed annexation map and improvement plans to Douglas County code and District requirements.
  - iii) The dedication of all rights-of-way, easements and all off-site improvements to the District.
  - iv) The applicant shall cause an amended annexation map to be drafted, submitted, and, if the property is annexed, recorded.
  - v) The payment of the annexation fees established for the property by these annexation procedures on or before the recordation of the order of annexation, or before the recordation of the subdivision plat or parcel map.

- vi) No property shall be annexed into the District that is proposed to be provided sewer services by use of a sewer lift station unless it is demonstrated to the satisfaction of the District that the property cannot be served by gravity flow sewer services.
- vii) In addition to the annexation fees, such fees as are required by the Minden-Gardnerville Sanitation District shall be paid to the District.
- viii) If applicable, the District shall approve the tentative and final maps, and a District representative shall, upon acceptance of the tentative and final maps, be provided with a jurat for signature.
- ix) The fee owner or owners of the property sought to be included within the District shall dedicate to the District a sufficient quantity and quality of water rights which shall meet or exceed the quantity and quality of water rights required by the District's Water Rights Dedication Policy found as Appendix F of this Manual.
- x) The order of annexation annexing the property into the District, or the order approving of out of District service(s) to a property not annexed into the District, shall be executed by the Chairman of the Board and recorded only upon the satisfaction of all standard and special conditions.
- xi) The property owner(s)/applicant(s) shall consent in writing to pay additional annexation fees should the property be re-zoned to a higher land use or a higher density.

A writing sufficient for recordation, acknowledged by the fee owner(s), shall indicate that a lien against the property shall be granted to the District for the difference between the annexation fees charged at the time of the order of annexation, and those which would have been charged if the property had been re-zoned for the higher density at the time of the annexation application.

- xii) In the case of a petition for out of District service(s), the fee owner or owners shall submit a written waiver of protest to assessments for future extensions of District services in a form sufficient for recordation, acknowledged by the fee owner(s).
- xiii) The property owner(s)/applicant(s) written acknowledgment that the property owner(s)/applicant(s) has been provided with a copy of these annexation procedures, that the applicant(s) is familiar with the contents hereof, and agrees to abide by all of the requirements if these annexation procedures.

E.4.1 **Special Conditions:** The Board may impose special conditions on a fee owner or owners of property sought to be included in the District after review of the application and the applicable codes and regulations of Douglas County and the District, and upon review of the special needs of the property and the District in the provision of District services to the property seeking annexation or out of District services.

#### E.5 ANNEXATION FEES

All annexation fees are repealed effective March 6, 2013.

## APPENDIX F WATER RIGHTS DEDICATION POLICY

The fee owner or owners of property seeking to be annexed into the District, or to receive out of District water service, shall dedicate to the District a sufficient quantity and quality of water rights equal to the estimated usage for the proposed use of the property. In addition, properties located within the District for which its original use is altered must dedicate water in an amount equal to the difference between the original and the proposed usage. Water rights proposed for dedication to the District shall meet the following criteria, unless otherwise approved by the District:

- The water rights shall be Nevada primary groundwater rights under a valid permit or certificate in good standing with the State Engineer and must be within the same hydrologic basin as the District;
- b. The Manner of Use for the water rights shall be classified as either municipal or quasi-municipal rights;
- c. The water rights shall not be subject to a reduction of duty because of consumptive use, nor shall they be supplemental to other water rights;
- d. For required dedications of less than 10 acre-feet annually, the dedication shall be a single, stand-alone permit or certificate;
- e. The property owner shall coordinate with the District Engineer for the appropriate Point of Diversion (groundwater well within the District) to list on change applications;
- f. The property owner shall coordinate with the District Engineer for the appropriate Place of Use to list on change applications and shall provide required maps or references to maps.

Prior to the District issuing approval of a Final Map for a proposed subdivision or issuing approval of a new water connection (or change in service), whichever comes first, the required amount of water rights meeting the above criteria must be dedicated to the District and all necessary change applications must be approved by the State Engineer and reports of conveyance must be filed with the State Engineer. All costs associated with change applications, reports of conveyance, and other documentation as required by the Division of Water Resources for the dedication of water rights, including, but not limited to, the District's engineering and attorney's fees, shall be paid for by the property owner. Preparation and filing of applications intended to facilitate the dedication of water rights to the District shall be the responsibility of the property owner.

Prior to completing applications for dedication of water rights, the property owner shall prepare water usage calculations based on fixture counts, converted to equivalent dwelling units (EDUs), for submittal to the District for review and approval. The quantity of water rights required for dedication, in acre-feet annually, shall be based on the State's requirements for the allocation of water rights per EDU. A property for which the water usage is decreased due to a change of use or other reason is not entitled to any compensation or refund as a result thereof.

APPENDIX G FORMS

# APPENDIX H STANDARD DETAILS

APPENDIX I MINIMUM RESERVE POLICY



# Gardnerville Ranchos General Improvement District Minimum Reserves Policy

The American Water Works Association (AWWA) has published M1 Principals of Water Rates, Fees and Charges. M1 contains the establishment of Minimum Reserve Policies for utilities. The District desires to be doubly conservative, the Reserve Policy will be calculated as follows:

90 Days Revenues as Operating Reserves90 Days Revenues as Emergency ReservesCapital Improvement ReservesDebt Financing Reserves at 150% of the Annual Debt Service

2020 Reserve Policy

Reserve Requirements:

180 Days Operating	
180 Days Emergency	
CIP Reserves:	\$500,000
Bond Reserves:	150% Annual Debt Service

	<u>General</u>	<u>Water</u>	Sewer
2019 Revenues	\$1,799,434	\$1,832,990	\$1,545,582
180 Days Operating	\$899,717	\$916,495	\$772,791

FUND BALANCE JUNE 30, 2019	\$3,166,635	\$5,690,659	\$6,758,016
TOTAL REQUIRED RESERVES	\$2,299,434	\$2,707,990	\$2,045,582
Bond Reserves:		\$375,000	
CIP Reserves	\$500,000	\$500,000	\$500,000
180 Days Emergency	\$899,717	\$916,495	\$772,791

As indicated, the District carries substantial reserves that will allow us to continue to meet our financial commitments and minimize impacts to our customers. Creation of a Reserve Policy can impact future decisions on rates. District staff recommends the adoption of a Reserve Policy in keeping with AWWA M1 x2.

The Minimum Reserve Policy shall be reviewed annually during the development of the annual budget.