### **OUT-OF-AREA SERVICE AGREEMENT**

### FOR PROVISION OF SEWER SERVICES

### **OASA 09-14**

This Agreement ("Agreement") is made and entered into to be ef	fective as of the
day of, 2011 (the "Effective Date") by and an	mong the City of
Fountain Valley ("City"), a municipal corporation, and the County of O	range ("County"),
a political subdivision of the State of California, and the Orange Cour	nty Local Agency
Formation Commission ("LAFCO"). The City and County and LAFCO	O may sometimes
be referred to individually as "Party" or collectively as "Parties"	throughout this
Agreement.	

### RECITALS

- A. The Garden Grove Sanitary District (GGSD) is a sanitary district created pursuant to Health & Safety Code sections 6400, et seq., that provides sanitary sewer service to approximately 71 acres of inhabited property described in *Exhibit A* hereto ("Pump Station Service Area").
- B. A significant portion of the Pump Station Service Area is within the City's corporate limits ("City Service Area"), but a smaller portion lies outside the City's corporate limits ("Extra-territorial Service Area"), both as depicted on the attached *Exhibit B*.
- C. GGSD owns and operates certain sewer collection facilities that serve the Pump Station Service Area, including those facilities that serve the Extra-territorial Service Area.
- D. The County does not own, operate or maintain sanitary sewer facilities or provide sanitary sewer services within the Extra-territorial Service Area.
- E. The City and GGSD have entered into an Agreement for Construction of Harbor and Heil Gravity Sewer, Removal of Harbor-Edinger Sewer Pump Station, and Transfer of Sewer Collection Facilities and Sewer Service Area from Garden Grove Sanitary District to the City of Fountain Valley (the "Service Transfer Agreement"). The Service Transfer Agreement is to be recorded and effective in conjunction with this agreement.
- F. Under the Service Transfer Agreement, the City agrees, upon GGSD's performance of certain obligations set forth therein, to assume sewer service responsibility in the City Service Area and the Extra-Territorial Service Area, and GGSD agrees to transfer its ownership of the sewer collection facilities described therein to the City.

- G. GGSD applied to the Orange County Local Agency Formation Commission ("LAFCO") to detach the Pump Station Service Area from GGSD. LAFCO approved this detachment (hereinafter "Detachment DD 09-14") on March 9, 2011, subject to the terms and conditions of LAFCO Resolution DD 09-14. LAFCO Resolution DD 09-14 is attached hereto and incorporated by reference as *Exhibit C*.
- H. Condition 2.c. of LAFCO Resolution DD 09-14 requires the City assume sewer service responsibility within the Extra-Territorial Service Area upon recordation of the Certificate of Completion.
- I. Condition 2.d. of LAFCO Resolution DD 09-14 requires that "The County of Orange and the City of Fountain Valley shall provide the LAFCO Executive Officer with signed copies of the Out-of-Area Service Agreement attached as "Exhibit A" prior to recordation." LAFCO policy and Government Code Section 56133 authorize LAFCO to approve the City's provision of sewer service to the Extra-territorial Service Area in anticipation of the City's later annexation of the area to the City.
- J. The City and County desire to fulfill conditions 2.c and 2.d of LAFCO Resolution DD 09-14, and are hereby entering into this Agreement, subject to the terms and conditions noted herein.
- K. The Parties desire to ensure that no interruption in the services that GGSD currently provides to the Extra-territorial Service Area results from the detachment of the Extra-territorial Service Area from GGSD.

### **AGREEMENT**

**NOW, THEREFORE,** in consideration of the mutual covenants, conditions and promises herein contained, it is hereby agreed by and between the City and County as follows:

### 1 Recitals

The Recitals herein are expressly made part of this Agreement.

- 2 Sewer Service in the Extra-territorial Service Area
- 2.1 City Shall Provide Sewer to the Extra-territorial Service Area

The Parties desire to provide for a process to verify and determine future sewer capacity for the Extra-territorial Service Area in the event that changes of use or new development occur in the area depicted in *Exhibit B*.

### 2.2 Term of Service

Until such time as the City annexes the Extra-territorial Service Area, the City shall provide sanitary sewer service to the Extra-territorial Service Area as if it was within the City's corporate boundaries.

### 2.3 Level of Service

The City shall maintain the same level of service to the Extra-territorial Service Area the City maintains in its overall service area in accordance with Federal, State and regional laws, regulations and permits.

### 2.4 <u>Coordination between County and City</u>

The process outlined in this agreement is not intended to conflict with the County's current notification process in other areas of the County as defined within the Orange County Board of Supervisor's Resolution 99-301.

### 2.5 New or Additional Service Connections

In the event that an applicant submits to the County a development application, which requires a new or augmented sewer service connection, the County shall require the developer to request the City review and approve service to the applicant as long as the operating sewer capacity, in terms of the volume of sewer flow or character of sewer discharge as established by the City in its procedures (Exhibit D), of the sewer system serving the Extra-territorial Area is not exceeded. County will have such requirement on its development approval check-off list given to developers/owners seeking to develop within the extra-territorial area. County agrees not to approve discretionary land use applications, which require a new or additional sewer service connection, without City concurrence that adequate sewer service capacity exists. The City's concurrence shall be in the form of a "will serve" letter which states that the City has available sewer service capacity to accommodate the proposed development. Such "will serve" letter will be granted if the City's sewer facilities have capacity and the character of the wastewater is consistent with laws regulating the same. In the event that the request requires improvements to provide additional system capacity, City shall request developer to complete a study and determination of improvements required to provide such service capacity, in accordance with Section 2.6. The City agrees that it will only base its decisions on whether to grant or deny applications for new sanitary sewer service connections on determination of adequate capacity of the City's sanitary sewer system and accommodation of the type of wastewater. The City shall not unreasonably withhold such concurrence if all applicable City Ordinances, Resolutions and procedures are complied with by an applicant for sewer capacity and service.

### 2.6 New or Additional Service Connections Exceeding Current Demand

If a developer's request proposes an increased sewer service requirement over the current demand of the property, the City shall review and determine if system capacity can accommodate the proposed sewer flows. The City shall be entitled to require project proponents to design and construct improvements to the sewer system if required to accommodate increased sewer flows at the proponent's expense.

### 2.7 <u>Due Process for Applicants Denied "Will Serve" Letter</u>

The City agrees to make determinations based on sewer and wastewater standards that are related to the City's system and City's ability to convey such type of wastewater. The City agrees to provide a written determination if an applicant is denied a will serve letter, which will be based on stated facts and will contain findings supporting the conclusion. The City agrees to provide such persons aggrieved by such a determination a right of appeal to the City Council or such officer as has been delegated the responsibility to hear such appeals as provided in the Fountain Valley Municipal Code.

### 2.8 System Maintenance

The City (by means of its contractors, agents or employees) shall own, operate, rehabilitate, replace and maintain the facilities transferred to it under the Service Transfer Agreement that service the Extra-territorial Service Area.

### 3 <u>Compensation for Service</u>

### 3.1 City Bears All Costs Of Providing Sewer Service

Any cost associated with owning, operating, and maintaining the facilities transferred to it under the Service Transfer Agreement and providing sewer service in the Extraterritorial Service Area shall be borne by the City, except as provided in Section 3.2

### 3.2 GGSD's Former Share Of Property Tax for Extra-territorial Service Area

After the recordation of the detachment of the Pump Station Service Area from the GGSD, the County shall make annual payments to the City in an amount equal to GGSD's former share of *ad valorem* property taxes for the Extra-territorial Service Area as compensation to the City for providing sewer service in the Extra-territorial Service Area.

### 3.3 City May Collect Sewer Fees and Charges In Extra-territorial Service Area

- 3.3.1 The City shall be entitled to charge fees and other charges to the extent permitted by law to provide sewer services to the Extraterritorial Service Area consistent with fees and others charges to provide services to the overall service area of the City.
- 3.3.2 The City shall bear any costs or attorneys' fees associated with the imposition or collection of sewer fees and charges on customers in the Extra-territorial Service Area, including but not limited to the costs associated with any notices, elections or analyses required by law as a condition to imposing such fees.

### 4 <u>Sanitary Sewer Regulations</u>

### 4.1 Compliance With Laws

The City shall operate the sanitary sewer system facilities and provide sanitary sewer service in the Extra-territorial Service Area in a manner consistent with all applicable governmental laws, ordinances and regulations, including permits, or orders including but not limited to any applicable Waste Discharge Requirements issued by the State Water Resources Control Board.

### 4.2 <u>County Cooperation</u>

The County shall reasonably cooperate with the City's adoption and enforcement of ordinances or regulations governing sanitary sewer services or facilities within the Extraterritorial Service Area. County agrees not to approve discretionary development applications within the Extra-territorial Service Area, which require a new or additional sanitary sewer service connection, unless the applicant provides evidence that it has obtained a "will serve" letter from the City. The standards for issuing such letter are set forth in Section 2.5.

### 5 Indemnification

### 5.1 Definition

As used in this Section 5, "Proceeding" means any threatened, pending, or completed claim, cause of action, civil liability, action, suit, arbitration, alternate dispute resolution process, investigation, administrative hearing, appeal or any other proceeding, whether civil, criminal, administrative, investigative or any other type whatsoever, whether formal or informal, including a proceeding initiated by County to enforce the County's rights hereunder.

### 5.2 By the City of the County

The City shall indemnify and defend the County, its officers, employees and agents (County Indemnitees), against and hold the County Indemnitees harmless from all claims, demands, liabilities, damages, losses, costs and expenses, including reasonable attorneys' fees and disbursements, arising from or related to:

- 5.2.1 Any Proceedings alleging that the County has a duty to dispose of sewage accumulating within the Extra-territorial Service Area.
- 5.2.2 Any Proceedings arising from sanitary sewer overflows from sanitary sewer systems owned or operated by the City in the Extraterritorial Service Area except those caused by County discharges or that arise from a failure to obtain a "will serve" letter before new development is approved.
- 5.2.3 Any breach of any of the representations or warranties made by the City in Section 6 of this Agreement.

This Section 5 shall survive the termination of this Agreement with respect to any claims, demands, liabilities, damages, injury, losses, costs and expenses arising or occurring prior to such termination.

### 5.3 By the County of the City

The County shall indemnify and defend the City, its officers, employees and agents (City Indemnitees), against and hold the City Indemnitees harmless from all claims, demands, liabilities, damages, losses, costs and expenses, including reasonable attorneys' fees and disbursements, arising from or related to:

- 5.3.1 Any County discharge of sewage that violates City's sewer regulations, County Sanitation District sewage regulations or any liability imposed by the State WDR or federal Clean Water Act.
- 5.3.2 Any claims against the City arising from the County's approval of any discretionary land use applications after the Effective Date of this Agreement in violation of Sections 2.5 or 2.6 that overburdens the system by volume of sewer flow or by character of sewer discharge. County shall not be liable for such indemnification if the developer has obtained the City's approval in the form of a "will serve" letter pursuant to Section 2.5 or 2.6.
- 5.3.3. Any breach of any of the representations or warranties made by the County in Section 6 of this Agreement.

### 6 Representation and Warranties

The City represents and warrants that it owns and operates all sanitary sewer facilities, which were previously owned and operated by GGSD, that are located in or serve the Extra-territorial Service Area. County represents that there are no approved developments for the Extra-territorial Service Area that have not yet been built as of the Effective Date of this Agreement. County represents that it will approve development in the Extra-territorial Service Area after the Effective Date consistent with the terms and conditions of this Agreement.

### 7 Term

This Agreement shall remain in effect in perpetuity until the City has annexed the entirety of the Extra-territorial Service Area

### 8 <u>Injunctive Relief</u>

It is agreed that the City's performance of Section 2 is unique and affects the health and safety of the public in and around the Extra-territorial Service Area and that no adequate remedy exists at law if the City fails to perform, or breaches, its obligations thereunder, that it would be difficult to determine the amount of damages resulting therefrom, and that such breach would cause irreparable injury to the County. Therefore, in addition to all other rights and remedies provided by law or in this Agreement, the County shall be entitled to injunctive relief, including specific performance, to prevent or restrain any breach of this Agreement.

### 9 Notice

Any notice or other communication required or permitted hereunder shall be in writing, and shall conclusively be deemed to have been given upon the date it is (i) enclosed in a sealed envelope addressed to the Party to whom it is intended, and deposited in the United States Mail with adequate postage; (ii) delivered to the office of the intended Party; (iii) sent by telefacsimile or other telegraphic communication in the manner provided in this Section with confirmation by U.S. Mail sent no later than the following day, or (iv) sent through other commercially reasonable means, such as overnight delivery by a reputable courier company. The addresses of the respective parties for all notices shall be:

CITY: City of Fountain Valley

Attn: Director of Public Works

10200 Slater Avenue

Fountain Valley, CA 92708

Attn: Mark Lewis

Telefacsimile (714) 593-4554

and

City Attorney

City of Fountain Valley 10200 Slater Avenue

Fountain Valley, CA 92708 Telefacsimile (714) 593-4494

COUNTY: County Executive Officer

Attn.: Steve Dunivent, Deputy CEO

333 W. Santa Ana Blvd Santa Ana, CA 92701

Telefacsimile (714) 834-4790

Any Party may, by written notice to the others, designate a different address, which shall be substituted for that specified above.

### 10 Miscellaneous

### 10.1 Entire Agreement

This Agreement (including the Exhibits hereto) constitutes the entire understanding and agreement of the Parties relating to the provision of sewer services for the Extra-Territorial Service Area.

### 10.2 Waiver

No waiver of any right or remedy by a Party with respect to any occurrence or event under this Agreement shall constitute a continuing waiver or be deemed a waiver of any right or remedy in respect to any other or subsequent occurrence or event.

### 10.3 Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute but one and the same instrument.

### 10.4 Severability

If any term, provision, covenant, or condition set forth in this Agreement is held by the final judgment of a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions, covenants, and conditions shall continue in full force and effect to the extent that the basic intent of the Parties as expressed herein can be accomplished.

### 10.5 Amendments

All amendments to this Agreement shall be in writing and, if approved, must be signed by all Parties.

### 10.6 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the date first set forth above.

ATTEST:	"CITY"
	CITY OF FOUNTAIN VALLEY
By:	By: Mayor
APPROVED AS TO FORM:	Mayor
By:City Attorney	
	"COUNTY"
ATTEST:	COUNTY OF ORANGE
By:County Counsel	By: County Executive Officer
APPROVED PURSUANT TO GOVERN SECTION 56133	MENT CODE
By: Orange County LAFCO Executive C	Officer
Exhibits:	

- A. Map & Legal Description of Detachment DD 09-14B. Depiction of Extra-Territorial Service Area
- C. LAFCO Resolution DD 09-14
- D. City of Fountain Valley Sewer Service Standards

### Exhibit A – Map & Legal Description of Detachment

### **EXHIBIT "A"**

LEGAL DESCRIPTION:

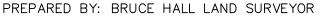
PARCEL 1A

THAT PORTION OF THE CITY OF FOUNTAIN VALLEY AND UNINCORPORATED TERRITORY IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A POINT IN THE EXISTING BOUNDARY LINE OF THE GARDEN GROVE SANITARY DISTRICT, SAID POINT BEING THE NORTHWESTERLY CORNER OF "ENGINEER'S NO. 1072-64" ANNEXATION;

THENCE FOLLOWING ALONG SAID EXISTING BOUNDARY LINE PER SAID "ENGINEER'S NO. 1072–64" ANNEXATION, PER "ANNEXATION NO. B-542–77", PER "PARCEL 20 OF REORGANIZATION NO. 66 (DETACHMENT OF GARDEN GROVE SANITARY DISTRICT FROM THE CITIES OF ORANGE AND SANTA ANA)", PER "ANNEXATION NO. 1242–66", PER "ANNEXATION NO. B-624–78", PER "ANNEXATION NO. B-601–78", PER SAID "ENGINEER'S NO. 1072–64" ANNEXATION, PER "ANNEXATION NO. B-687–80", PER SAID "ENGINEER'S NO. 1072–64" ANNEXATION, PER "ENGINEER'S NO. 1171–65" ANNEXATION, PER SAID "ENGINEER'S NO. 1072–64" ANNEXATION, PER "ANNEXATION NO. B-745–83", PER SAID "ENGINEER'S NO. 1072–64" ANNEXATION, PER "ANNEXATION NO. K-330–73", PER "ANNEXATION NO. B-535–77", AND SAID "ENGINEER'S NO. 1072–64" ANNEXATION THROUGH IT'S VARIOUS COURSES IN A GENERAL EASTERLY, SOUTHWESTERLY, WESTERLY, SOUTHERLY, WESTERLY, SOUTHERLY, EASTERLY, SOUTHWESTERLY AND NORTHERLY DIRECTION TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 66.12 ACRES, MORE OR LESS.

ALL AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

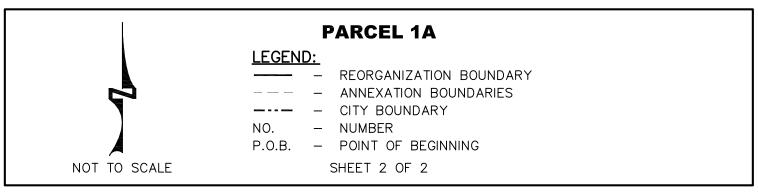


LS 4743

EXP. 9/30/09







### **EXHIBIT "A"**

LEGAL DESCRIPTION:

PARCEL 1B

THAT PORTION OF THE CITY OF FOUNTAIN VALLEY IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN ANGLE POINT IN THE EXISTING BOUNDARY LINE OF THE GARDEN GROVE SANITARY DISTRICT, SAID ANGLE POINT BEING THE NORTHEASTERLY CORNER OF "ENGINEER'S NO. 527-58" ANNEXATION TO SAID DISTRICT;

THENCE FOLLOWING ALONG SAID EXISTING BOUNDARY LINE PER SAID ANNEXATION THROUGH IT'S VARIOUS COURSES IN A GENERAL WESTERLY, SOUTHERLY, EASTERLY, SOUTHERLY, EASTERLY AND NORTHERLY DIRECTION TO THE POINT OF BEGINNING.

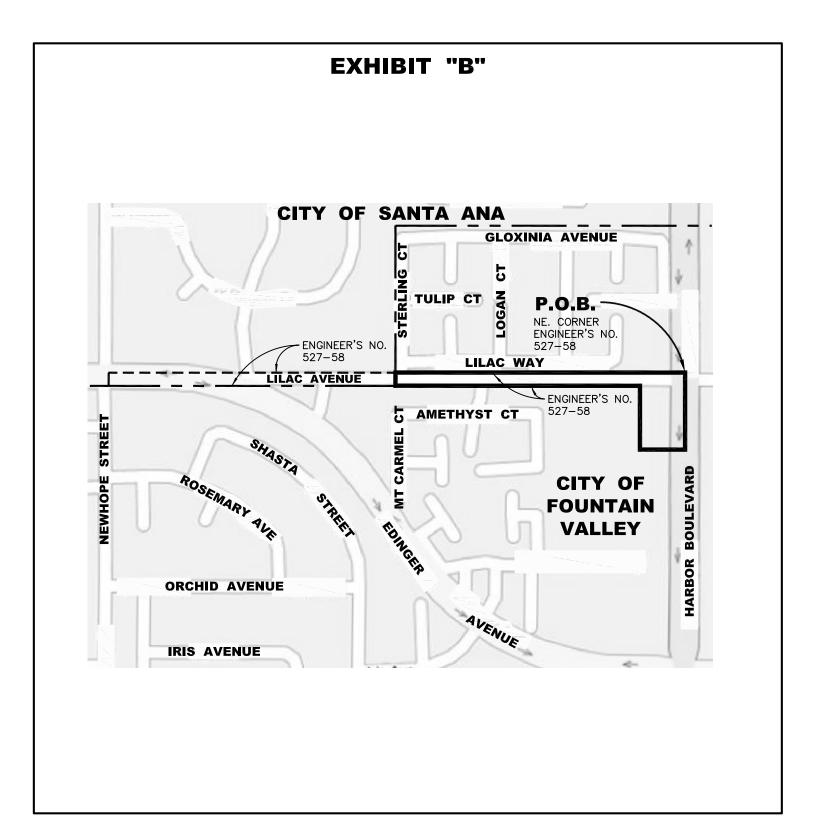
THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 3.18 ACRES, MORE OR LESS.

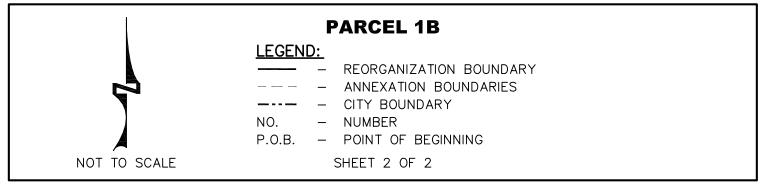
ALL AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

PREPARED BY: BRUCE HALL LAND SURVEYOR LS 4743

EXP. 9/30/09







### **EXHIBIT "A"**

LEGAL DESCRIPTION:

PARCEL 1C

THAT PORTION OF THE CITY OF FOUNTAIN VALLEY IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN ANGLE POINT IN THE EXISTING BOUNDARY LINE OF THE GARDEN GROVE SANITARY DISTRICT AS ESTABLISHED BY "REORGANIZATION NO. 66" OF SAID DISTRICT, SAID ANGLE POINT BEING 30.00 FEET SOUTHERLY ALONG THE EASTERLY LINE OF "ENGINEER'S NO. 789–60" ANNEXATION TO SAID DISTRICT FROM IT'S NORTHEASTERLY CORNER THEREOF, SAID POINT ALSO BEING 30.00 FEET SOUTHERLY FROM THE CENTERLINE OF EDINGER AVENUE;

THENCE FOLLOWING ALONG SAID EXISTING BOUNDARY LINE PER SAID "ENGINEER'S NO. 789–60" ANNEXATION AND PER "ENGINEER'S NO. 1206–66" ANNEXATION THROUGH IT'S VARIOUS COURSES IN A GENERAL SOUTHERLY, WESTERLY, NORTHERLY, WESTERLY AND NORTHERLY DIRECTION TO AN ANGLE POINT IN SAID EXISTING BOUNDARY LINE AS ESTABLISHED BY SAID "REORGANIZATION NO. 66" AND "ENGINEER'S NO. 1206–66" ANNEXATION, SAID POINT BEING 30.00 FEET SOUTHERLY MEASURED ALONG THE WESTERLY LINE OF SAID "ENGINEER'S NO. 1206–66" ANNEXATION FROM IT'S NORTHWESTERLY CORNER, SAID ANGLE POINT ALSO BEING AN ANGLE POINT IN THE EXISTING COMMON BOUNDARY LINE OF THE CITY OF FOUNTAIN VALLEY AND THE CITY OF SANTA ANA, AS ESTABLISHED BY "ANNEXATION NO. 2" TO SAID CITY OF FOUNTAIN VALLEY AND THE "WEST SANTA ANA ANNEXATION" TO SAID CITY OF SANTA ANA; THENCE FOLLOWING ALONG SAID EXISTING BOUNDARY LINE OF SAID DISTRICT AND SAID EXISTING COMMON BOUNDARY LINE THROUGH THEIR VARIOUS COURSES IN A GENERAL EASTERLY DIRECTION TO THE POINT OF BEGINNING.

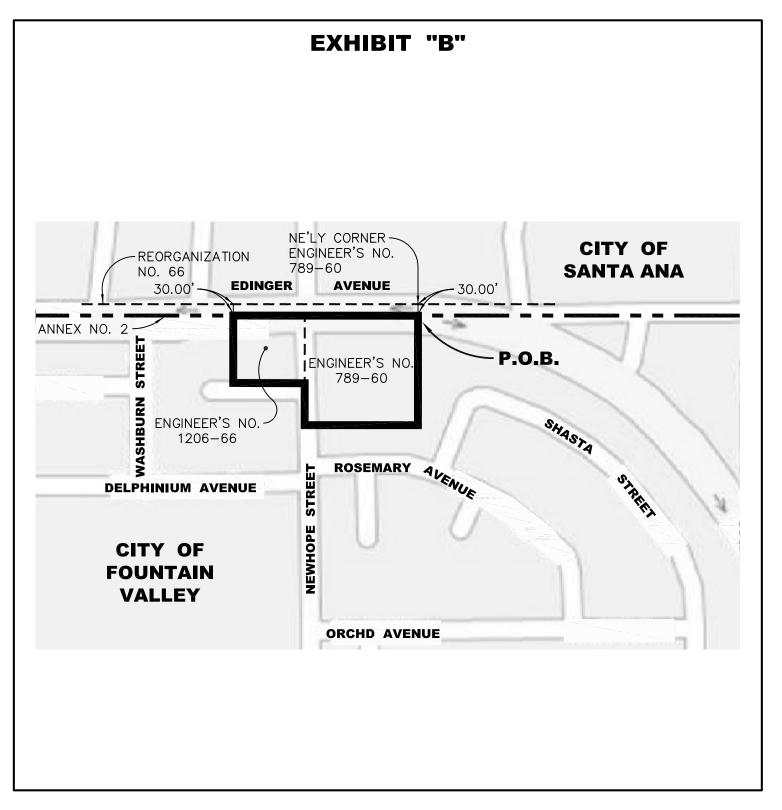
THE ABOVE DESCRIBED PARCEL OF LAND CONTAINS 2.51 ACRES, MORE OR LESS.

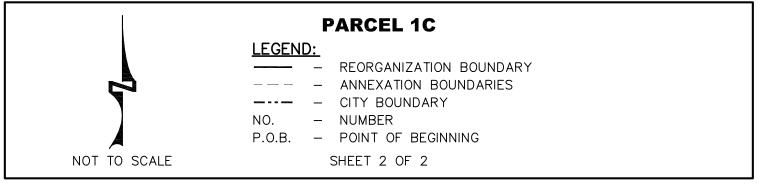
ALL AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AND BY THIS REFERENCE MADE A PART HEREOF.

PREPARED BY: BRUCE HALL LAND SURVEYOR

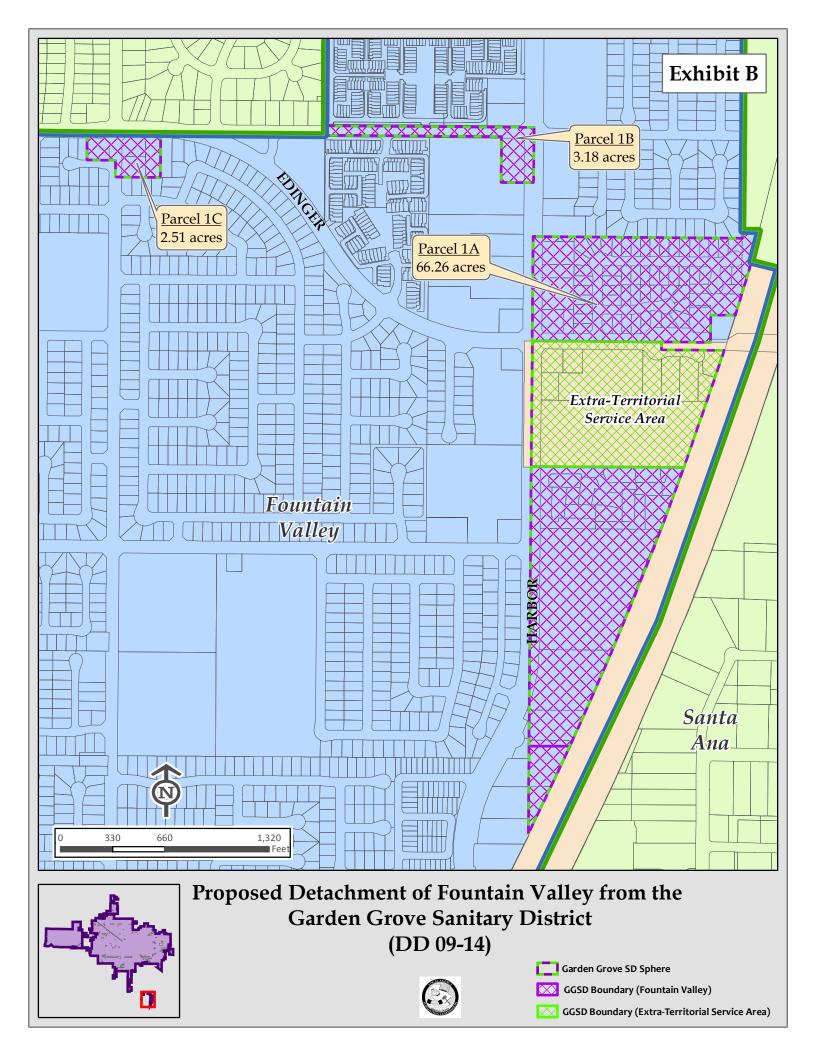
LS 4743 EXP. 9/30/09







## Exhibit B — Depiction of Extra-Territorial Service Area



### Exhibit C – LAFCO Resolution

### DD 09-14

# RESOLUTION OF THE LOCAL AGENCY FORMATION COMMISSION OF ORANGE COUNTY, CALIFORNIA APPROVING THE GARDEN GROVE SANITARY DISTRICT DETACHMENT FROM THE CITY OF FOUNTAIN VALLEY March 9, 2011

On motion of	, duly seconded and carried, the following
resolution was adopted:	

WHEREAS, the proposed detachment from the Garden Grove Sanitary District, designated as "Garden Grove Sanitary District Detachment from the City of Fountain Valley" (DD 09-14), was heretofore filed with and accepted for filing on February \_\_\_, 2011, by the Executive Officer of this Local Agency Formation Commission pursuant to Title 5, Division 3, commencing with Section 56000 et seq. of the Government Code; and

WHEREAS, the Executive Officer, pursuant to Government Code Section 56664 set

March 9, 2011, as the hearing date of this proposal; and

WHEREAS, the Executive Officer, pursuant to Government Code Section 56665 has reviewed this proposal and prepared a report including her recommendation thereon, and has furnished a copy of this report to each person entitled to a copy; and

WHEREAS, this Commission on March 9, 2011, considered the proposal and the report of the Executive Officer, and considered the factors determined by the Commission to be relevant to this proposal, including, but not limited to, factors specified in Government Code Section 56668; and

WHEREAS, this Commission called for and held a public hearing on the proposal on March 9, 2011, and at the hearing, this Commission heard and received all oral and written protests, objections and evidence which were made, presented or filed, and all persons present were given an opportunity to hear and be heard with respect to this proposal and the report of the Executive Officer; and

WHEREAS, this Commission has fulfilled its obligations as the responsible agency as defined by the California Environmental Quality Act and has reviewed and considered the Notice of Exemption for the detachment of the subject territory adopted by the City of Garden Grove as the lead agency on July 9, 2009.

NOW, THEREFORE, the Local Agency Formation Commission of the County of Orange DOES HEREBY RESOLVE, DETERMINE and ORDER as follows:

- Section 1. Pursuant to the California Environmental Quality Act, the Commission has reviewed and considered the Notice of Exemption for the detachment of the subject territory adopted by the City of Garden Grove as the lead agency on July 9, 2009.
- Section 2. The proposal is approved subject to the following terms and conditions:
  - a) Payment of Recorder and State Board of Equalization fees.
  - b) The applicant agrees to defend, hold harmless and indemnify LAFCO and/or its agents, officers and employees from any claim, action or proceeding against LAFCO and/or its agents, officers and employees to attack, set aside, void or annul the approval of LAFCO concerning this proposal or any action relating to or arising out of such approval.
  - c) The County of Orange and the City of Fountain Valley shall provide the LAFCO Executive Officer with signed copies of the Out-of-Area Service Agreement attached as "Exhibit A" prior to recordation.
  - d) Upon the effective date of detachment, the City of Fountain Valley shall assume ownership and maintenance responsibilities for all sewer distribution lines devices (predominately 8 inch diameter with a small percentage of 12 inch and 15 inch lines) and all

manholes (spaced approximately 400 ft. apart) that are within the detachment area and are currently operated and maintain by the Garden Grove Sanitary District.

- e) Upon the effective date of detachment, the City of Fountain Valley shall assume sewer service responsibility within the detachment area, including the Extra-Territorial Service Area as defined within the attached Out-of-Area Service Agreement attached as "Exhibit A".
- f) The effective date of the annexation shall be the date of recordation.
- Section 3. The annexing area is found to be inhabited, is within the incorporated boundaries of the City of Fountain Valley and unincorporated Orange County, and is assigned the following distinctive short-form designation: "Garden Grove Sanitary District Detachment from the City of Fountain Valley" (DD 09-14).
- Section 4. The Commission authorizes and directs the Executive Officer to conduct protest proceedings pursuant to Government Code Sections 57000 et seq. and set a 21-day protest period.
- Section 5. The Executive Officer is hereby authorized and directed to mail copies of this resolution as provided in Section 56882 of the Government Code.

AYES:

NOES:

STATE OF CALIFORNIA )

) SS.

COUNTY OF ORANGE )

I, JOHN MOORLACH, Chair of the Local Agency Formation Commission of Orange County, California, hereby certify that the above and foregoing resolution was duly and regularly adopted by said Commission at a regular meeting thereof, held on the 9<sup>th</sup> day of March, 2011.

IN WITNESS WHEREOF, I have hereunto set my hand this  $9^{th}$  day of March, 2011.

JOHN MOORLACH Chair of the Orange County Local Agency Formation Commission

By:		
, -	John Moorlac	h

## Exhibit D – City of Fountain Valley Sewer Service Standards

# CITY OF FOUNTAIN VALLEY Standards for Sewer Facilities



Prepared for CITY OF FOUNTAIN VALLEY Fountain Valley, California

Prepared by
AKM CONSULTING ENGINEERS
553 Wald
Irvine, California 92618

February 2011

### **TABLE OF CONTENTS**

<u>Sect</u>	<u>ion</u>		<u>Page</u>
1	Stan	dard Requirements	1
2	Calc	ulations Required	1
3	Wast	tewater Quality	1
4	Size.		2
5	Minir	mum and Maximum Slope	2
6	Desig	gn Flow Criteria	3
7	-	dard Location and Alignment	
8		ments	
9	Horiz	zontal Curves	4
10	Statio	oning Procedure	4
11	Minin	num Depth	5
12	Sewe	er Pipe Material	5
13	Manh	noles	5
	13.1	Manhole Requirements	5
	13.2	Manhole Type and Size	5
	13.3	Manhole Covers	6
	13.4	Manhole Linings and Coatings	6
14	Clear	1-Outs	7
15	Greas	se Interceptors	7
16	Sepa	ration Between Sewer and Water and Recycled Water Lines	7
17	Hous	e Laterals	7
18	Priva	te Sewer Systems	8
19	Sewe	er Pump Stations	8
20	Inspe	ection and Testing of Gravity Sewers	9
	20.1	CCTV Inspection	9
	20.2	Gravity Pipe Leakage Tests	9
	20.3	Manhole Leakage Tests	
	20.4	Pipe Slope	10
21	Stand	lard Sewer Notes	10

### 1. STANDARD REQUIREMENTS

The design and construction of all sanitary sewer system facilities to be operated and maintained by the City of Fountain Valley (City) shall be in accordance with these Design Criteria, and the latest edition of the following:

- The City of Fountain Valley Standard Plans, latest edition
- Standard Specifications for Public Works Construction (Greenbook)
- City of Fountain Valley's Sewer System Management Plan
- City of Fountain Valley Ordinance No. 1445
- Statewide General Waste Discharge Requirements issued by the State Water Resources Control Board (Order No. 2006-0003)
- Requirements of the jurisdictional agencies where the work shall be performed
- Cal-OSHA requirements

### 2. CALCULATIONS REQUIRED

Substantiating engineering calculations for design flows; pipe size; pump, motor, generator, wet well size and appurtenant equipment selection; structural design, and bedding/backfill designs shall accompany plan submittals to the City. All calculations shall be sealed and signed by a California registered professional engineer.

Where flow from a new development or redevelopment is proposed to be added to an existing City sewer, and where the new development or redevelopment is in an area of questionable sewer capacity, the existing sewer shall be flow monitored by a qualified company acceptable to the City at the owner's cost for a minimum period of two weeks to verify the existing minimum, average, and peak dry weather flows. The location(s) of flow monitoring shall be determined by the City Engineer. Two copies of the flow monitoring report shall be submitted to the City in the City's required format. The City will determine the adequacy of capacity in all the City facilities that will convey the subject flow to the Orange County Sanitation District facilities, and obtain verification from Orange County Sanitation District of capacity in the regional sewers. Service to proposed development or redevelopment shall be subject to availability of capacity in the City sewers and in the Orange County Sanitation District sewers.

### 3. WASTEWATER QUALITY

Wastewater discharged to the City's collection system shall meet all character and quality requirements and limits set by the City of Fountain Valley, and Orange County Sanitation District, including:

- a. Fountain Valley Municipal Code Section 14.38, Grease Control
- b. Orange County Sanitation District Ordinance No. OCSD-31, which "establishes quantity and quality limits on all wastewater discharges which may adversely affect the OCSD's sewerage systems, processes, effluent quality, air emission characteristics, or inhibit the OCSD's ability to beneficially resue its treated wastewater, biosolids, or meet biosolids discharge criteria."

### 4. SIZE

### **Gravity Sewers**

The minimum size gravity sewer shall be 8-inches in diameter. The City of Fountain Valley may accept 6-inch diameter sewer lines if they must be used to provide adequate velocity. Sewer pipes shall not be constructed in a common trench with another utility. Adequate horizontal and vertical clearance shall be maintained in accordance with the State of California Department of Health Services "Criteria for the Separation of Water Mains and Sanitary Sewers".

### **Force Mains**

The size of sewer force mains shall be determined during the design phase of the project based upon a comparative study of the construction cost and pumping costs for several alternative sizes. In no case shall a force main be less than 4 inches in diameter. The capacity of the force main shall be the design peak flow from the pump station. The minimum design velocity for a force main shall be 3.0 fps, and maximum allowed 5.0 fps. The discharge shall be into a manhole with a smooth flow transition to a gravity sewer. The force main terminal manhole shall be PVC lined.

All force mains shall have a tape attached to the pipe, identifying it as a sewer pipe.

A properly valved bypass pumping connection shall be provided on the forcemain as near the wet well as feasible or in the valve vault downstream of the check valves for connecting a portable pump in case the main sewage pumps cannot be used for any reason.

### 5. MINIMUM AND MAXIMUM SLOPE

All sewers shall be designed and constructed to provide a mean velocity of not less than two (2) feet per second (fps) when flowing at the estimated average dry weather flow as calculated using Manning's formula with an "n" value of 0.013. Subject to the velocity limitations contained in this subsection, the slope shall be the maximum possible. Drop manholes shall not be used to reduce slopes to the minimum allowed.

The maximum allowable slope shall be the slope which generates a maximum flow velocity of 6 fps at the peak dry weather flow rate in vitrified clay pipe (VCP), and 5 fps in polyvinyl chloride pipe (PVC) as calculated using Manning's equation with an "n" value of 0.013.

The minimum slope on 6-inch sewer shall be 1% where the tributary area consists of less than 20 dwelling units (d.u.) or its flow equivalent.

Sewer pipes shall have a constant slope between the upstream and downstream manhole of each reach. Any reach of sewer containing sags of any amount shall be removed and reconstructed at the design slope at no cost to the City of Fountain Valley. The total cost of inspection, administration, and retesting of improperly installed sewers shall be borne by the contractor. The City of Fountain Valley shall not accept any sewer that does not meet these requirements. There shall be no exception to the proper slope requirement.

### 6. DESIGN FLOW CRITERIA

The average dry weather flow  $(Q_{adw})$  rates for sewers shall be calculated using the unit flow factors contained in Table 1 and the tributary land uses. Where appropriate, and when required by the City of Fountain Valley, the unit flow factors shall be evaluated by the design engineer based upon the specific land uses and densities proposed for new development or redevelopment.

Table 1
Unit Flow Factors

Land Use Designation	Land Use	Unit Flow Factor	Units
R1	Single Family Residential	270	GPD/DU
R2	Low Density Multiple Dwelling	270	GPD/DU
R3, GH	Medium Density Multiple Dwelling	190	GPD/DU
R4, AH	High Density Multiple Dwelling	190	GPD/DU
C1, C2, CP	Commercial / Business	1,800	GPD/AC
M1, MR	Manufacturing	1,800	GPD/AC
A1	General Agriculture - Parks	200	GPD/AC
A1	Schools	20	GPD/STU

The peak dry weather flow  $(Q_{pdw})$  in cubic feet per second (cfs) shall be determined from  $Q_{adw}$  in cfs based upon the following equation:

Where the tributary area is mostly developed, coefficients a and b shall be based upon a minimum of two weeks of flow monitoring where the tributary flow from a new development or redevelopment is added to an existing sewer. Where such information is not available, the following equation shall be used to determine the peak dry weather flow:

The determination of the peak dry weather flow shall also consider other factors such as pumped flows and large sewer flow generators.

The peak wet weather flow  $(Q_{pww})$  shall be based upon recorded historical information where available and applicable. Otherwise, the peak wet weather flow shall be calculated utilizing the larger of the following:

The peak dry weather flow rate in pipes 15-inches and smaller will be limited by the calculated depth to pipe diameter ratio of d/D = 0.5; and 18-inches and larger d/D = 0.64.

The pipe shall flow at a calculated depth to pipe diameter ratio of less than 0.82 with the peak wet weather flow.

### 7. STANDARD LOCATION AND ALIGNMENT

In local residential and industrial streets, sewer pipes shall be located six (6) feet from the centerline of the street in the center of the driving lane. In major, primary, and secondary highways, the sewer pipes shall be located in the center of the driving lane nearest to the center of the street, but will **not** be located in the median strip or parking lanes. Any deviation from the standard location and alignment shall only be done with prior written approval of the City.

All-weather access roads capable of accommodating all required construction and maintenance equipment shall be provided for all sewers not located within a paved street.

In curved streets, gravity sewer mains shall be constructed in straight reaches between manholes. In no case shall the outside of the sewer main be closer than four feet to the closest curb face.

A maximum horizontal separation between sewer and domestic water mains shall be achieved by aligning the sewer on the opposite side of the street centerline from the domestic water main.

### 8. EASEMENTS

Permanent easements, where absolutely necessary, shall be a minimum of 30 feet in width and shall be shown on the plans. Temporary easements for construction only shall be shown on the plans including date of termination.

Where applicable, permanent public utility easements shall be recorded on the tract map, and granted to the City of Fountain Valley. When applicable, separate easement documents for both permanent and temporary easements shall be prepared (on standard title company forms) and presented to the City of Fountain Valley for acceptance and recording.

The City may accept sewers on private streets upon granting of a public utility easement to the City.

The City will not accept any easement for sewers if said easement cannot be accessed with a flush truck through its entire length.

Sewer easement shall be located entirely on one lot. Building set backs shall be minimum 20 feet from easement edges.

### 9. HORIZONTAL CURVES

Gravity sewer mains shall **not** be designed with horizontal curves.

### 10. STATIONING PROCEDURE

Centerline stations for sewers shall be shown on the plans. Sewer centerline stations shall be independent of street stationing. All manholes shall be numbered and the numbers noted on the plans (example: MH #1). Sewer stations shall start at 1+00.00 at the

downstream point of connection and increase upstream to the last manhole on a sewer line. Intersecting sewer lines will be independently stationed from their downstream point of connection and increase upstream to the last manhole. Each line shall be independently labeled for identification as "Sewer Line A", "Sewer Line B", etc.

### 11. MINIMUM DEPTH

Unless dictated otherwise by the elevation of an existing mainline sewer, house connections shall be installed so that there is a minimum of five (5) feet of cover from the top of the curb to the top of the pipe at the curb line. At the time of construction, stakes shall be provided for location and grade of each house connection.

### 12. SEWER PIPE MATERIAL

All gravity sewers shall be either extra strength VCP. Imperfections **shall not be allowed** in either type of pipe. Sewer service laterals shall be of the same material as the main line sewer-either extra strength VCP or SDR-26 PVC pipe.

All gravity sewers in industrially zoned areas or major commercial areas shall be extra strength VCP.

### 13. MANHOLES

### 13.1 Manhole Requirements

A manhole will be required at:

- A. The upstream end of each line, change in grade or size, change in alignment, or intersection of two (2) or more sewers
- B. At a lateral when it is the same size as the main line sewer
- C. Along the sewer main at maximum distances of 300 feet for 6-inch sewers, 400 feet for 8-inch and larger sewers.

### 13.2 Manhole Type and Size

Manholes shall be precast reinforced concrete with eccentric cone in accordance with City of Fountain Valley Standard Plans 402-1, 402-2, 403, 404, and 405. The summit manholes shall be precast reinforced concrete with concentric cone. Minimum diameter shall be 48 inches and larger sizes shall be required as shown in the following table:

Manhole Sizes

Sewer Main (inches)	Maximum Branch Size (inches)	Manhole Size (inches)	Frame and Cover (inches)
8-15	10	48	30
18-21	12	60	30
24-36	15	72	36

**Extra Depth Requirements** 

Depth of Cover	Manhole Size
(feet)	(inches)
6 or less	60
6.5-12	48
12.5-16	60
16.5 and greater	72

All manholes shall be provided with at least all-weather vehicular access.

### 13.3 Manhole Covers

Manhole covers shall be cast iron in accordance with City of Fountain Valley Standard Plan 405. The size shall be determined from the table in Section 12.2.

Temporary covers may be necessary in new streets. In these cases, the manhole shaft shall be left six (6) inches, minimum, below subgrade. A heavy metal plate acceptable to the City Engineer shall be provided to cover the manhole opening. Cleats shall be provided in at least four (4) points for the underside of the temporary cover to prevent the temporary cover from moving. These cleats shall extend a minimum of 3 inches from the cover plate and shall be welded to the plate.

Plywood shall be cut to the shape and size of the manhole base and placed in the base before the temporary cover is placed on the shaft. At the completion of final paving, each manhole shall be raised to final grade by the installation of grade rings, as necessary, and the installation of the permanent frame and cover assembly. Plywood shall be removed from the manhole when the permanent frame and cover assembly is installed.

### 13.4 Manhole Linings and Coatings

The following manholes will be lined with PVC:

- A. If the sewer has a slope of 5% or greater, all the manholes on the sewer
- B. Where there is a change in slope, from steep to flat, of 3% or greater, the manhole at the grade change and the next manhole upstream
- C. All force main terminal manholes
- E. As required by the City Engineer

The approved PVC liners are Ameron T-Lock liner and Koroseal Lok-Rib by B. F. Goodrich. Refer to Orange County Sanitation District Standard Drawing S-065 for PVC liner details.

Outer surfaces of precast and cast-in-place manholes and structures shall be given two coats of bituminous dampproofing applied at a rate in accordance with manufacturer's instructions. In no case shall the total bituminous coating be less than 16 mil dry film thickness.

### 14. CLEAN-OUTS

Use of clean-outs as shown in the City of Fountain Valley Standard Plan 408-1 and 408-2 shall be limited to the following instances unless approved otherwise by the City Engineer.

- A. At the upstream end of short sections of sewer, less than 250 feet which will be extended within three months.
- B. All sewer laterals at the property owner's side of the property line.
- C. Special instances such as on a sewer lateral to a single family residential lot where the dwelling unit is set back more than 100 feet from the property line, where there is a large slope up to the building pad from the property line and a grade change in the lateral is necessary, or where the sewer lateral enters the rear of the lot from a public right-of-way.
- D. On a lateral where the overflow level of the lowest wastewater fixture in the building is below the rim elevation of the uphill sewer manhole on the main line. In this situation the rim elevation of the clean-out installed at the property line shall be at least 6-inches below the overflow elevation of the lowest wastewater fixture on the lateral. A backflow prevention device is required on the lateral.

### 15. GREASE INTERCEPTORS

Grease interceptors shall be installed as required by the City of Fountain Valley Building Department.

### 16. SEPARATION BETWEEN SEWER AND WATER AND RECYCLED WATER LINES

Horizontal and vertical separation between sewer mains and water and reclaimed water lines will be provided in accordance with the State of California Department of Public Health "Criteria for Separation of Water Mains and Sanitary Sewers".

### 17. HOUSE LATERALS

Sewer laterals shall be constructed to the property line from the main line and there shall be a separate lateral for each individual building.

Sewer laterals shall have a minimum 4-inch diameter. Apartment and condominium developments shall have at least one (1) 6-inch, or one (1) 8-inch lateral to serve each building in the development which contains more than one dwelling unit.

Laterals shall have a minimum slope of 2%.

The improvement plans shall indicate the centerline station of the lateral on the sewer and show the distance from a property corner. In no case shall a sewer lateral be located within 10 feet of a property corner. Refer to Section 13 and Standard Plan 401-1 and 401-2 for laterals.

Permanent visible monuments shall be set to indicate the locations of all sewer laterals. A 1½-inch high "S" shall be chiseled in face of curb where the lateral crosses under the curb or on the edge of alleys without curbs. The method used shall be indicated on the plans. A licensed Civil Engineer or Land Surveyor shall verify locations of set monuments.

The sewer laterals from the main to the building, and inside the buildings are governed by the Uniform Plumbing Code and enforced by the City of Fountain Valley Building Official.

The sewer house laterals between the main sewer line and the property line are owned by the property owner, and **NOT** by the City of Fountain Valley.

### 18. PRIVATE SEWER SYSTEMS

All plans submitted for review and approval for commercial/industrial developments and residential developments with private sewer systems shall show the plans, profiles, and details of private onsite sewer systems. The private sewer systems shall be planned, designed, and constructed to the same standards as the City of Fountain Valley's public sewer system.

Sewer pump stations on private property shall be designed, administered, and inspected by the City of Fountain Valley or its designated representative. The private property owner shall be responsible for all costs associated with such design, administration, and inspection.

Each site shall be reviewed on an individual basis at the time plans are submitted. As a condition of service, the City of Fountain Valley shall require the property owner to enter into an agreement with the City acknowledging that the onsite facilities are private and shall be properly maintained according to industry standards and the State Water Resources Control Board's General Waste Discharge Requirements 2006-0003. The property owner shall further agree to hold the City of Fountain Valley harmless from any claims on the design, maintenance and operation of the private onsite systems.

All onsite sewer collection systems for commercial/industrial developments shall be private and shall be owned, operated and maintained by the property owner up to the City's sewer line in a public street. A cleanout or manhole shall be installed at the owner's side of the property line in accordance with City Standard Plans 408-1 and 408-2, or 402 through 405. Each building onsite shall have an individual sewer lateral with a monitoring manhole. Monitoring manholes shall be installed in accordance with City criteria. All laterals from a building shall be connected to the main lateral upstream of the monitoring manhole for that building. No lateral connections shall be made downstream of the monitoring manhole.

### 19. SEWER PUMP STATIONS

All sewer pump stations conveying wastewater flows to the City of Fountain Valley's collection system, including those from private systems, shall be designed, administered, and inspected by the City of Fountain Valley, or its authorized representative.

### 20. INSPECTION AND TESTING OF GRAVITY SEWERS

### 20.1 CCTV Inspection

The Contractor shall perform Closed Circuit Television inspection (CCTV) of all gravity sewers to determine alignment, grade and damaged or defective pipe in place; after the pipe has been installed, backfilled and compacted to grade, tested for leakage, manholes raised to grade, but prior to final resurfacing, from manhole to manhole. CCTV inspection shall be recorded on current media acceptable to the City, and recording procedures shall conform to the requirements of Standard Specifications for Public Works Construction Section 500-1.1.5, Television Inspection, except that the maximum speed shall be 15 feet per minute. The recording shall continuously display the following on-screen data: contract number, project name, date, time, distance (in feet) from the insertion manhole, and manhole identification codes.

Two copies of the recording shall be submitted to the City for approval within two days of the CCTV inspection. CCTV recording shall be performed first with the pipe dry, and then immediately following clean water flowing in the pipe to clearly indicate vertical misalignments, sags or other defects. Should CCTV inspection indicate any faulty installation of the pipe, repairs or replacement shall be made at the Contractor's expense by a method approved by the City. Repaired and or replaced pipe and/or segments shall be retested and reinspected through CCTV at no additional cost to the City, until final acceptance is granted. Any sag greater than one (1) 0.5 inch in 100 feet of pipe reach shall be considered excessive, and the pipe shall be removed and reinstalled to proper grade.

### 20.2 **Gravity Pipe Leakage Tests**

All gravity sewer pipes and service laterals shall be tested for exfiltration and/or infiltration and deflection. All leakage tests shall be in conformance with Standard Specifications for Public Works Construction (SSPWC), "GREENBOOK" Section 306-1.4.1. Water exfiltration test shall be in conformance with SSPWC Section 306-1-4.2. Air pressure test shall be in conformance with SSPWC 306-1.4.4. All testing shall be performed in the presence of the City Inspector.

### 20.3 Manhole Leakage Tests

- Leakage tests shall be made and observed by the City Inspector on each manhole.
   The test shall be the exfiltration test made as described below:
- 2. After the manhole has been assembled in place, all lifting holes and those exterior joints within 6 feet of the ground surface shall be filled and pointed with an approved non-shrinking mortar and the lining joints completed. The test shall be made prior to placing the shelf and invert. If the groundwater table has been allowed to rise above the bottom of the manhole, it shall be lowered for the duration of the test. All pipes and other openings into the manhole shall be suitably plugged and the plugs braced to prevent blow out.
- 3. The manhole shall then be filled with water to the top of the cone section. If the excavation has not been backfilled and observation indicates no visible leakage, that is, no water visibly moving down the surface of the manhole, the manhole may be

considered to be satisfactorily water-tight. If the test, as described above is unsatisfactory as determined by the City Inspector, or if the manhole excavation has been backfilled, the test shall be continued. A period of time may be permitted if the Contractor so wishes, to allow for absorption. At the end of this period, the manhole shall be refilled at the top of the cone, if necessary and the measuring time of at least 8 hours begun. At the end of the test period, the manhole shall be refilled to the top of the cone, measuring the volume of water added. This amount shall be extrapolated to a 24-hour rate and the leakage determined on the basis of depth. The leakage for each manhole shall not exceed 1 gallon per vertical foot for a 24-If the manhole fails this requirement, but the leakage does not exceed hour period. 3 gallons per vertical foot per day, repairs by approved methods may be made as directed by the City to bring the leakage within the allowable rate of 1 gallon per foot per day. Leakage due to a defective section or joint or exceeding the 3 gallon per vertical foot per day shall be the cause for the rejection of the manhole. It shall be the Contractor's responsibility to uncover the manhole as necessary and to disassemble, reconstruct or replace it as directed by the City Engineer. The manhole shall then be retested and, if satisfactory, interior joints shall be filled and pointed.

- 4. No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc., i.e., it will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete. Furthermore, the Contractor shall take all steps necessary to assure the City Inspector that the water table is below the bottom of the manhole throughout the test.
- 5. If the groundwater table is above the highest joint in the manhole, and if there is no leakage into the manhole as determined by the Engineer, such a test can be used to evaluate the water-tightness of the manhole. However, if the City Engineer is not satisfied, the Contractor shall lower the water table and carry out the test as described herein before.

### 20.4 Pipe Slope

All gravity sewer pipe shall be laid to the line and grade shown on the plans and per Section 306.1.2 of "GREENBOOK," with a maximum allowable tolerance of 0.125 inch at the invert. The Contractor shall continuously check the grade of the pipe being installed through the use of laser line.

### 21. STANDARD SEWER NOTES

The following notes must appear on the plans under Standard Sewer Notes.

- A. The sewer Contractor shall have a copy of the Project Plans and Specifications, as well as the City of Fountain Valley Design Criteria for Sewer Facilities on the job site.
- B. The Contractor shall obtain a City and/or County permit for work done on public right-of-way.
- C. The City of Fountain Valley Office shall be called for inspection five (5) working days before start of work at (714) 593-4433.

- A pre-construction conference shall be held 48 hours before starting construction work.
- E. The Contractor shall expose all join points to the existing sewer system for verification of location and elevation before construction.
- F. Stations shown as 1+00.00 are sewer stations and are independent of all other stations.
- G. All laterals shall be staked by a surveyor before trenching and a complete set of cut sheets shall be supplied to the Contractor and the City Inspector.
- H. The City will inspect the sewer collection system. Privately owned sewer laterals from the City sewer main will be inspected and tested by an approved contractor subject to the City of Fountain Valley Building Department approval.
- I. All sewer lines shall be balled in the presence of the City Inspector before completion of all leakage tests.
- J. Pipeline leakage tests shall be made in the presence of the City Inspector, only after backfill has been completed, compaction tests on backfill have been made, and the backfill has been accepted by the City Inspector.
- K. All sewer main lines shall be inspected using a closed circuit television system. Two recordings shall be made of the inspection on current media acceptable to the City in accordance with the City of Fountain Valley Specifications for Video Inspection of Sewer Lines. One recording shall inspect the system constructed with no flow, and one shall conduct the inspection 15 minutes after flowing water in the sewer.
- L. The Contractor shall provide the City of Fountain Valley with an as-built set of job prints with tie-down measurements for all laterals and manholes.
- M. Before final acceptance, the developer's engineer signing the plans shall furnish the City of Fountain Valley with a set of as-built mylars of the sewer plan.
- N. Curbs, or pavement surfaces in alleys where sewer laterals exist shall be inscribed with an "S" indicating locations of all sewer laterals.
- Curbs shall be inscribed with ties for all manhole locations.

Add the following notes to plans having <u>on-site</u> work which will be dedicated to the City:

Trench backfill, on all sewer lines to be dedicated to the City, shall be compacted to a minimum of 90% relative density as determined by the five-layer test method (California 216G). Tests will be required every 300-feet of trench or as determined by the City Inspector. The developer shall submit written results of compaction testing to the City before acceptance. If in dedicated street or future street, compaction will be as required by governmental agency having jurisdiction, but no less than 90 percent relative compaction.