

**Collections Component of the
SEWER IMPACT FEE
ANALYSIS**

**for
Service Area 4**

September 2016

Project No. 060-16-07

Prepared for:



Prepared by:



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EXECUTIVE SUMMARY – IFA

Introduction

The purpose of this Impact Fee Analysis (IFA) is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah Code. The District has formed Service Area 4 shown in Figures 1 and 2, which will serve a future development where no existing sewer infrastructure currently exists.

Why Assess an Impact Fee?

South Valley Sewer District (SVSD or District) can assess an impact fee to equitably allocate the costs to the District's Capital Facilities that are required by new growth. The collected fees may be used to construct needed facilities or to reimburse those developers who will fund the construction of new sewer infrastructure that will serve future development. The general impact fee methodology employed here divides the available capacity of existing and future capital projects between the number of existing and future users. Capacity is measured in terms of Equivalent Residential Units, or ERUs, which represents the demand that a typical single family residence places on the system.

It should be noted that this IFA is limited to collection facilities to be owned and operated by SVSD. Service Area 4 is located in an area of the District that drains toward Utah County and eventually connects to conveyance and treatment facilities owned and operated by Timpanogos Special Service District (TSSD). Thus, in addition to the impact fees calculated here, properties in Service Area 4 will also be required to pay an impact fee to SVSD on behalf of TSSD in association with their use of capacity in TSSD facilities.

How Are Impact Fees Calculated?

A fair impact fee is calculated by dividing the cost of existing and future facilities by the amount of new growth that will benefit from the unused capacity. Only the capacity that is needed to serve the projected growth within the next ten years is included in the fee. Costs used in the calculation of impact fees include:

- New facilities required to maintain (but not exceed) the proposed level of service identified in the Impact Fee Facilities Plan (IFFP); only those expected to be built within ten years are considered in the final calculations of the impact fee.
- Historic costs of existing facilities that will serve new development
- Cost of professional services for engineering, planning, and preparation of the impact fee facilities plan and impact fee analysis

Costs not used in the impact fee calculation

- Operational and maintenance costs
- Cost of facilities constructed beyond 10 years
- Cost associated with capacity not expected to be used within 10 years
- Cost of facilities funded by grants, developer contributions, or other funds which the District is not required to repay

- Cost of renovating or reconstructing facilities which do not provide new capacity or needed enhancement of services to serve future development

Impact Fee Calculation

Impact fees for this analysis were calculated by dividing the proportional cost of facilities required to service growth by the amount of growth expected, expressed in ERUs. This is done for each of the major system components. Calculated impact fees by component are summarized in Table ES-1.

Table ES-1
Sewer Impact Fee Calculation per ERU

System Components	Total Cost of Component	% Serving 10-year Growth	Cost Serving Growth	Total ERUs Served	Cost Per ERU
Collection Facilities					
Existing Facilities	\$0	-	\$0	-	\$0
Existing Facility Interest Costs Outstanding	\$0	-	\$0	-	\$0
10-year Project	\$1,798,100	100.0%	\$1,798,100	422	\$4,260.90
10-Year Project Interest Cost	\$0	-	\$0	-	\$0
Subtotal	\$1,798,100	100.0%	\$1,798,100	422	\$4,260.90
Other					
Impact Fee Study	\$10,000	100.0%	\$10,000	422	\$23.69
Subtotal	\$10,000	100.0%	\$10,000	422	\$23.69
Total	\$1,808,100		\$1,808,100		\$4,284.59

The total impact fee per ERU can be calculated by adding up the fee for each type of system component. This is separate from any additional charges levied by the District for hookup costs or for other reasonable permit and application fees.

Recommended Impact Fee

The total calculated impact fee is summarized in Table ES-2. This is the legal, maximum amount that may be charged as an impact fee. A lower amount may be adopted if desired, but a higher fee is not allowable under the requirements of Utah Code.

Table ES-2
Recommended Sewer Impact Fee

Maximum Allowable Impact Fee (Per ERU)	
Total Overall Fee	\$4,284.59

IMPACT FEE ANALYSIS

INTRODUCTION

South Valley Sewer District (SVSD or District) has retained Bowen Collins & Associates (BC&A) to prepare an Impact Fee Analysis (IFA) for a new collection service area in its sewer system based on a recently completed Impact Fee Facilities Plan (IFFP). SVSD has historically identified multiple service areas for the purposes of rate and impact fee calculations. In order to maintain equity between customers in existing service areas and a new area of proposed development, the District is forming a new collection service area as identified in Figures 1 and 2. This new service area will be referred to as Service Area 4 and will serve a future development where no existing sewer infrastructure currently exists.

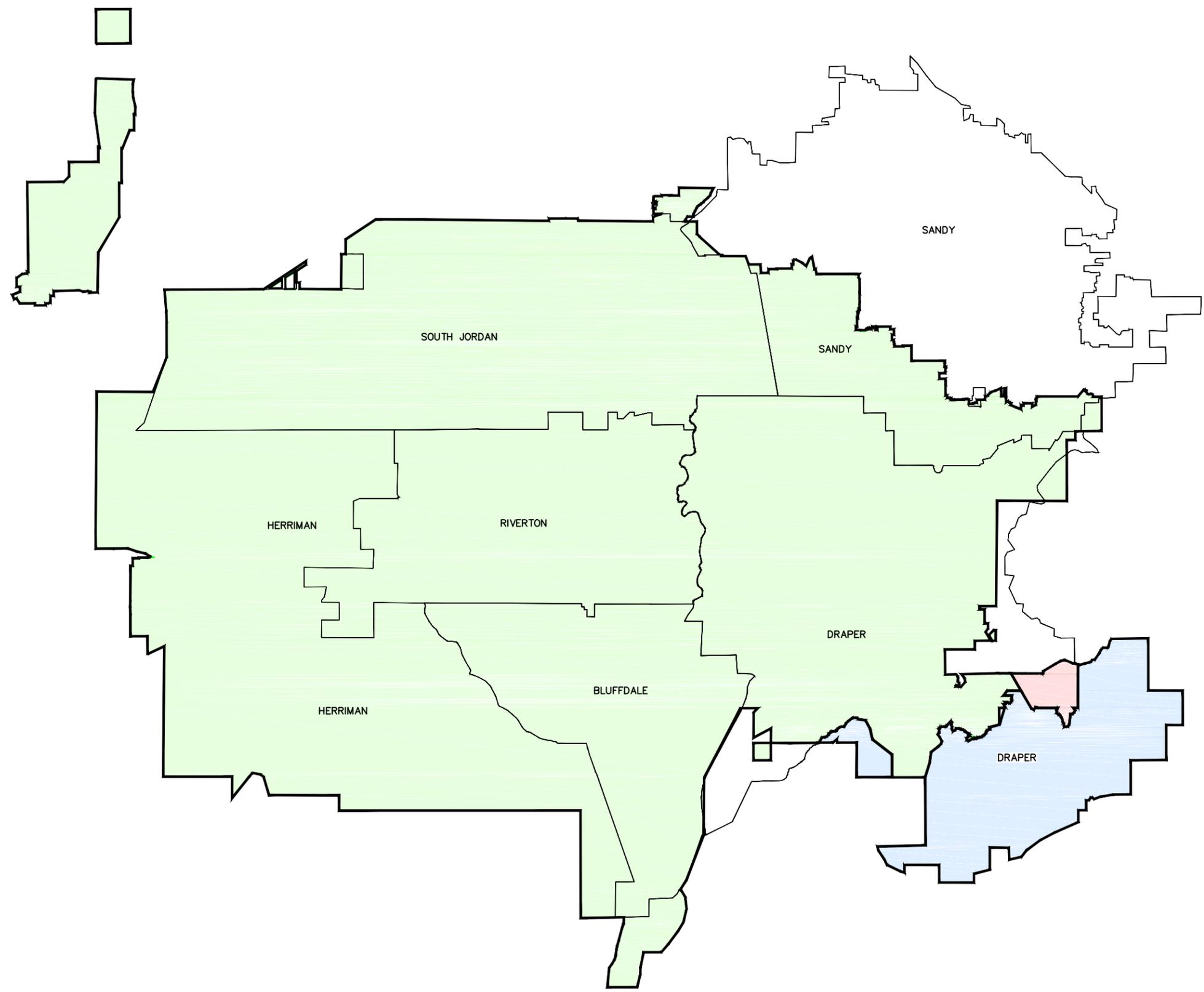
An impact fee is a one-time fee, not a tax, imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. The purpose of an IFA is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah Code.

It should be noted that this IFA is limited to collection facilities to be owned and operated by SVSD within Service Area 4. Service Area 4 is located in an area of the District that drains toward Utah County and eventually connects to conveyance and treatment facilities owned and operated by Timpanogos Special Service District (TSSD). Thus, in addition to the impact fees calculated here, properties in Service Area 4 will also be required to pay an impact fee to SVSD on behalf of TSSD in association with their use of capacity in TSSD facilities.

Requirements for the preparation of an IFA are outlined in Title 11, Chapter 36a of the Utah Code (the Impact Fees Act). Under these requirements, an IFA shall accomplish the following for each facility:

1. Identify the impact of anticipated development activity on existing capacity
2. Identify the impact of anticipated development activity on system improvements required to maintain the established level of service
3. Demonstrate how the impacts are reasonably related to anticipated development activity
4. Estimate the proportionate share of:
 - a. Costs of existing capacity that will be recouped
 - b. Costs of impacts on system improvements that are reasonably related to the new development activity
5. Identify how the impact fee was calculated
6. Consider the following additional issues
 - a. Manner of financing improvements
 - b. Dedication of system improvements
 - c. Extraordinary costs in servicing newly developed properties
 - d. Time-price differential

The following sections of this report have been organized to address each of these requirements.



Legend

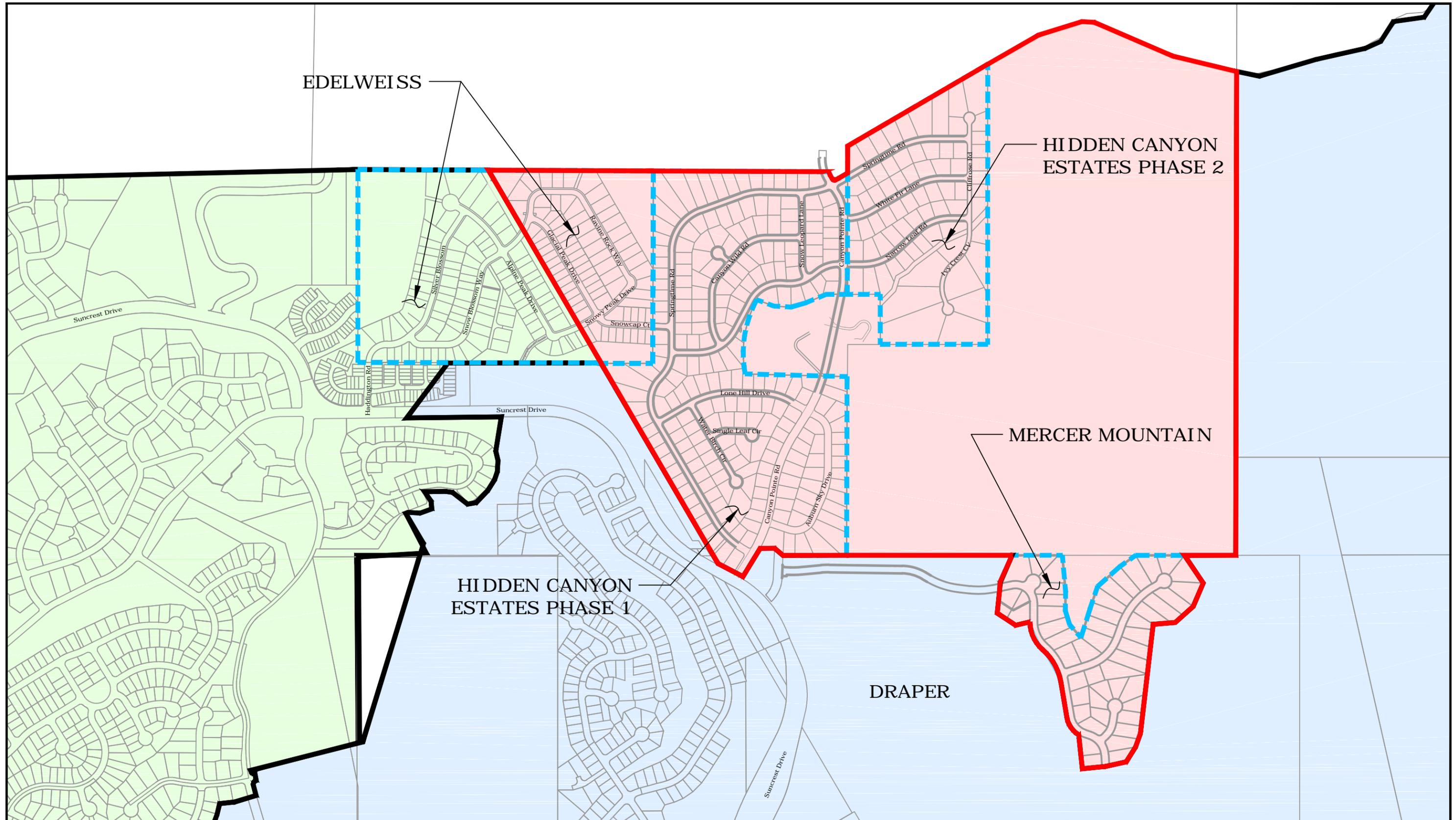
- Service Area 1
- Service Area 3
- Service Area 4

— SVSD Boundary



FIGURE 1
SVSD SERVICE AREAS

August 2016



	<p>Legend</p> <ul style="list-style-type: none"> Service Area 1 Service Area 3 Service Area 4 	<ul style="list-style-type: none"> SVSD Boundary SVSD Service Area No. 4 Boundary Subdivision Boundary 		<p>Bowen Collins & Associates, Inc. CONSULTING ENGINEERS</p>	<p>FIGURE 2 SVSD SERVICE AREA 4 August 2016</p>
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IMPACT ON SYSTEM - 11-36a-304(1)(a)(b)

Growth within the District's Service Area 4, and projections of sewer flows resulting from said growth is discussed in the District's IFFP. For the purposes of impact fee calculation, growth in the system has been expressed in terms of equivalent residential units (ERUs). An ERU represents the demand that a typical single family residence places on the system. The projected potential future growth within the new service area is 422 ERUs. Only single family residences are anticipated within the new service area.

RELATION OF IMPACTS TO ANTICIPATED DEVELOPMENT - 11-36a-304(1)(c)

To satisfy the requirements of state law, it is necessary to show that all impacts identified in the impact fee analysis are reasonably related to the anticipated development activity. This has been documented in detail in Impact Fee Facilities Plan. In short, only that capacity directly associated with demand of future development has been identified as an impact of the development. The steps completed to identify the impacts of anticipated development are as follows.

1. **Existing Demand, Capacity, and Deficiencies** – Normally, the demand existing development places on the system would be estimated based on historic demand records, capacities of existing facilities would be calculated, and existing deficiencies in the system would be identified. However, there is no existing demand and there are no existing facilities in this case.
2. **Future Demand** - The demand future development will place on the system was estimated based on development projections as discussed in the Impact Fee Facilities Plan.
3. **Future Demand Use of Existing Capacity** – Whenever possible, excess capacity in existing facilities should be used to serve future demands. In this case, however, there are no existing facilities. Thus, all future demand will be met through new facilities.
4. **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development.

PROPORTIONATE SHARE ANALYSIS - 11-36a-304(d)

A proportionate share analysis associated with anticipated future development and its impact on the system was completed as part of the Impact Fee Facilities Plan. A summary of that analysis is contained here with additional discussion of the costs of facilities impacted by growth.

Future Improvements

Without any existing facilities in the service area, demand associated with projected future development must be met solely through the construction of new facilities. A primary focus of the IFFP was the identification of all the projects required to serve the new development. In the case of Service Area 4, only a single project is required to serve the new development as summarized in Table 1. Included in the table are the costs of the required project and the portion of costs associated with development. In this case, 100 percent of the cost can be assigned to future growth.

Table 1

Impact Fee Eligible Capital Project

Project ¹	District Construction/Purchase Cost	Percent Attributable to 10-Year Growth	Cost Attributable to 10-Year Growth
Service Area No. 4 Gravity Sewer Outfall	\$1,798,100	100.0%	\$1,798,100
Total	\$1,798,100		\$1,798,100

¹ Project number represents numbering used in IFFP found in the sewer IFFP.

The cost estimate contained in this IFA has been taken directly from the IFFP. The basis of this estimate is documented in the IFFP.

IMPACT FEE CALCULATION - 11-36a-304(1)(e)

Using the information contained in the previous sections, impact fees can be calculated by dividing the proportional cost of facilities required to service future growth by the amount of growth expected. This is done for each of the major system components identified previously. Calculated impact fees by component are summarized in Table 2.

Table 2
Impact Fee Calculation per ERU

System Components	Total Cost of Component	% Serving 10-year Growth	Cost Serving Growth	Total ERUs Served	Cost Per ERU
Collection Facilities					
Existing Facilities	\$0	-	\$0	-	\$0
Existing Facility Interest Costs Outstanding	\$0	-	\$0	-	\$0
10-year Project	\$1,798,100	100.0%	\$1,798,100	422	\$4,260.90
10-Year Project Interest Cost	\$0	-	\$0	-	\$0
Subtotal	\$1,798,100	100.0%	\$1,798,100	422	\$4,260.90
Other					
Impact Fee Study	\$10,000	100.0%	\$10,000	422	\$23.69
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Total	\$1,808,100		\$1,808,100		\$4,284.59

The total impact fee per ERU can be calculated by adding up the fee for each type of system component. This is separate from any additional charges levied by the District for hookup costs or for other reasonable permit and application fees.

Bonding Interest Costs

No bonding will take place for the new facilities. Therefore, no bonding interest costs are needed for this analysis.

Impact Fee Studies

Utah Code allows for the cost of planning and engineering associated with impact fee calculations to be recovered as part of an impact fee. This category includes the cost of all planning and engineering costs associated with this study.

Recommended Impact Fee

The total calculated impact fee is \$4,284.59 per ERU.

Calculation of Non-Standard Impact Fees

The calculations above have been based on an ERU. The Impact Fee Enactment should include a provision that allows for calculation of a fee for customers other than typical residential connections, even though such development is not currently anticipated. Consistent with the level of service standards established in the Impact Fee Facilities Plan, the following formula may be used to calculate an impact fee for a non-standard user based on the calculated daily indoor water use for an average residential connection.

$$\frac{\text{Estimated Indoor Water Use}}{223 \text{ gallons per day}} \times \text{Impact Fee per ERU} = \text{Impact Fee}$$

ADDITIONAL CONSIDERATIONS - 11-36a-304(2)

MANNER OF FINANCING - 11-36a-304(2)(a-e)

As part of this Impact Fee Analysis, it is important to consider how the facility will be paid for. Potential infrastructure funding includes a combination of different revenue sources.

User Charges

Because infrastructure must generally be built ahead of growth, there often arises situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. If interfund loans are used, they should be considered in subsequent accounting of impact fee expenditures. However, in this case, funding is expected to come through other sources and no interfund loans are anticipated.

Special Assessments

Where special assessments exist, the impact fee calculation must take into account funds contributed. In this case, no special assessments exist. Therefore, no funds are expected to come from special assessments at this time.

Bonds

None of the costs contained in the IFFP included bonding. Therefore, no funding from bonds is anticipated for the construction of infrastructure.

General Taxes

If taxes are used to pay for infrastructure, they should be accounted for in the impact fee calculation. Specifically, any contribution made by property owners through taxes should be credited toward their available capacity in the system. In this case, no taxes are proposed for the construction of infrastructure.

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the District has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given. In this case, no federal and state grants and donations are proposed for the construction of infrastructure.

DEDICATION OF SYSTEM IMPROVEMENTS - 11-36a-304(2)(f)

Developer exactions are not the same as grants. If a developer constructs a system improvement or dedicates land for a system improvement identified in this IFFP, or dedicates a public facility that is recognized to reduce the need for a system improvement, the developer may be entitled to an appropriate credit against that particular developer's impact fee liability or a proportionate reimbursement.

If the value of the credit is less than the development's impact fee liability, the developer will owe the balance of the liability to the District. If the recognized value of the improvements/land dedicated is more than the development's impact fee liability, the District may be required to reimburse the difference to the developer.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. Developers will be responsible for the construction of project improvements (i.e. improvements not identified in the impact fee facilities plan) without credit against the impact fee.

EXTRAORDINARY COSTS - 11-36a-304(2)(g)

The Impact Fees Act indicates the analysis should include consideration of any extraordinary costs of servicing newly developed properties. In cases where one area of potential growth may cost

significantly more to service than other growth, a separate service area may be warranted. No areas with extraordinary costs have been identified as part of this analysis.

TIME-PRICE DIFFERENTIAL - 11-36a-304(2)(h)

Utah Code allows consideration of time-price differential in order to create fairness for amounts paid at different times. With only a single project that is expected to be constructed almost immediately, no time-price differential issues are pertinent to this analysis.

IMPACT FEE CERTIFICATION - 11-36a-306(2)

This report has been prepared in accordance with Utah Code Title 11, Chapter 36a (the “Impact Fees Act”), which prescribes the laws pertaining to the imposition of impact fees in Utah. The accuracy of this IFFP relies in part upon planning, engineering, and other source data, provided by the District and its designees.

In accordance with Utah Code Annotated, 11-36a-306(2), Bowen Collins & Associates makes the following certification:

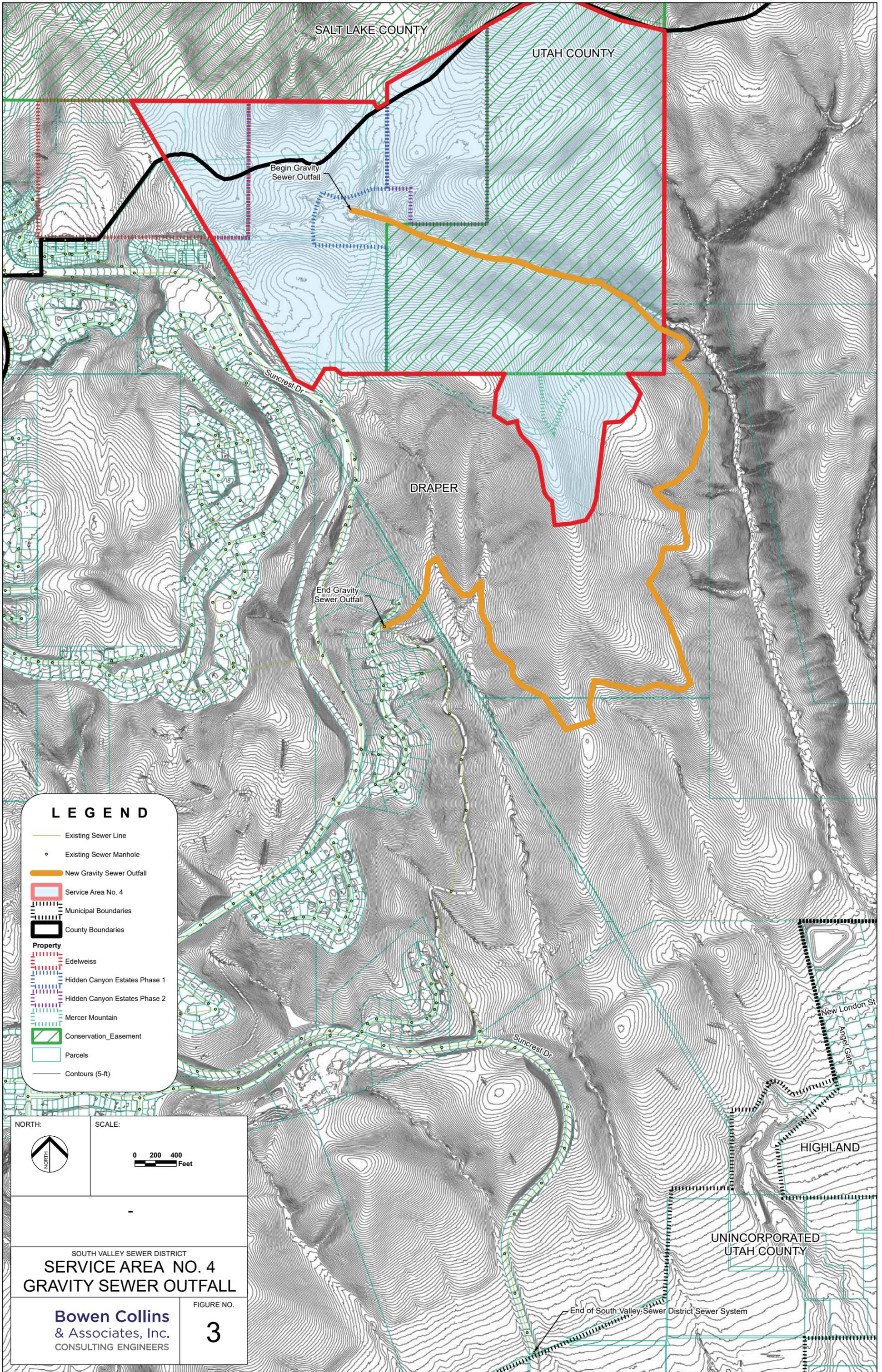
I certify that the attached impact fee analysis:

1. Includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act.



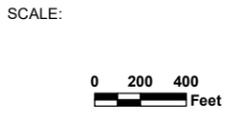
Keith J. Larson, P.E.

APPENDIX



LEGEND

- Existing Sewer Line
- Existing Sewer Manhole
- New Gravity Sewer Outfall
- Service Area No. 4
- Municipal Boundaries
- County Boundaries
- Property**
- Edelweiss
- Hidden Canyon Estates Phase 1
- Hidden Canyon Estates Phase 2
- Mercer Mountain
- Conservation Easement
- Parcels
- Contours (5-ft)



SOUTH VALLEY SEWER DISTRICT
SERVICE AREA NO. 4
GRAVITY SEWER OUTFALL

Bowen Collins
 & Associates, Inc.
 CONSULTING ENGINEERS

FIGURE NO.
3