

DRAFT Technical Memorandum

To: Mike Geary, General Manager
Tom Campbell, Finance Officer

From: Catherine Hansford

Date: September 23, 2014

Subject: Revenue Impacts of the Village Development on SVPSD - DRAFT

Purpose

Squaw Valley Real Estate (SVRE) has plans for development of the Village at Squaw Valley (hereinafter "The Project"). The Project will receive fire, water and sewer service from the Squaw Valley Public Services District (SVPSD). The SVPSD engaged Hansford Economic Consulting (HEC) to provide an independent projection of the revenue generation of the Project to SVPSD.

This revenue generation projection is one of several analyses being conducted for the SVPSD to adequately plan for the Project's impacts on infrastructure and operations and associated budgets.

Summary Findings

On an annual recurring basis SVPSD will receive property taxes and water and sewer rate revenues. At Project buildout (year 2040 in the financial model) SVPSD is projected to receive an additional \$3.41 million each year from the Project in property taxes, \$1.47 million each year in water rate revenues, and \$810,000 each year in sewer rate revenues. Annual recurring revenues are shown in **Table 1**.

Over the course of 25 years to Project buildout it is projected that SVPSD will receive additional revenues of \$84.47 million. Of the total additional revenues, \$41.94 million is estimated from net new property tax, \$27.08 million from net new rate revenue, and \$15.45 million from one-time fee revenue. **Table 2** provides the estimated net new revenues over the first 5 years of development, the subsequent 10 year development periods, and totals over 25 years.

Assumptions

The projected revenue generation of the Project on the SVPSD is based on many assumptions, as detailed in this memorandum. **Appendix A** provides support tables for the model assumptions.

Table 1
Estimated Net New Ongoing Annual Revenues

Revenue Source	Estimated Annual Revenue in Year		
	5	15	25
Net New Property Tax [1]	\$745,000	\$1,715,000	\$3,414,000
Net New Rate Revenue			
Water	\$258,000	\$711,000	\$1,472,000
Sewer	\$235,000	\$463,000	\$810,000
Subtotal Net New Rate Revenue	\$493,000	\$1,174,000	\$2,282,000
Estimated Total Annual Project Revenue	\$1,238,000	\$2,889,000	\$5,696,000

Source: HEC.

annual rev

Note: Excludes one-time fee revenues.

[1] The analysis does not account for property turnover.

Land Use Assumptions

Per SVRE’s July 2014 land use plan, at buildout the Project will encompass 850 residential units with 1,493 bedrooms, 302,797 square feet of non-residential uses, and housing for 252 employees. Residential units may be any mix of hotel/condo, fractional, or timeshare units, or some variation thereof. For this analysis 819 units are assumed condo hotel, and 31 units fractional. SVRE has identified Area 14 of the Project as timeshare; however, to be conservative with revenue projection this analysis assumes that Area 14 is condo hotel.

The majority of the residential development is located in the eastern portion of the Project area (“East Village”). All of the identified fractional cabins are located in the western portion of the Project area (“West Village”). All employee housing is located at the entrance to the valley. Co-located with employee housing is a 5,000 square foot market and 15,000 square foot shipping and receiving center.

Non-residential development is primarily in the East Village, comprising a mountain adventure camp, ski services and amenities space, as well as retail and restaurant/food and beverage space. Proposed supporting non-residential space in the West Village includes common areas and meeting space, retail, restaurant, ski services and a transit center. **Table 3** on page 4 provides a summary of proposed Project land uses.

Table 2
Summary of Projected Total Additional Revenues

Revenue Source	Timeframe (Years)			Total
	0 to 5	6 to 15	16 to 25	
Net New Property Tax [1]	\$2,143,000	\$13,196,000	\$26,601,000	\$41,940,000
Net New Rate Revenue				
Water	\$569,000	\$5,160,000	\$10,787,000	\$16,516,000
Sewer	\$518,000	\$3,777,000	\$6,268,000	\$10,563,000
Subtotal Net New Rate Revenue	\$1,087,000	\$8,937,000	\$17,055,000	\$27,079,000
Subtotal Net New Ongoing Revenues	\$3,230,000	\$22,133,000	\$43,656,000	\$69,019,000
One-Time Fees				
Water	\$2,756,000	\$3,137,000	\$5,921,000	\$11,814,000
Sewer	\$597,000	\$509,000	\$910,000	\$2,016,000
Fire	\$485,000	\$409,000	\$730,000	\$1,624,000
Subtotal One-Time Fee Revenue	\$3,838,000	\$4,055,000	\$7,561,000	\$15,454,000
Estimated Total Project Revenue	\$7,068,000	\$26,188,000	\$51,217,000	\$84,473,000

Source: HEC.

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[1] The analysis does not account for property turnover.

Detailed land use assumption tables are found in **Tables A-1 through A-5**. Some existing buildings will be demolished, and other existing buildings remodeled as part of the Project. **Table A-6** provides a draft schedule of existing building square feet that will be removed as part of the Project. The Project is estimated to be constructed within 25 years, per information supplied by SVRE.

Assessed Valuation Assumptions

Assessed valuation assumptions by land use are provided in **Table A-7**. HEC estimated the assessed value of a new condo hotel unit at \$770,000 and fractional cabins at \$2,550,000 per unit using data from the Resort at Squaw Creek, Squaw Lodge, The Village, and Northstar Village on units sold and listed within the 18-month time period from January 1, 2013 through June 30, 2014. These real estate comparison data are listed in **Table A-8**. The median price per building square foot (sold and asking prices) was \$604.

The price per square foot of \$604 was applied to the Project condo hotel units to obtain a weighted average price of \$770,000 per unit. In reality, units in different areas of the Project

will command a range of prices; however, this level of analysis is impossible at an early planning stage. The price per square foot should be adjusted as the housing market changes, just as land use assumptions should be updated as building plans change.

Table 3
Project Land Use Summary

Land Use	Timeframe (Years)		
	5	15	25
RESIDENTIAL UNITS / BEDS			
Condo Hotel	211	259	349
Fractional Cabins	31	0	0
Timeshare	0	0	0
TOTAL RESIDENTIAL UNITS	242	259	349
TOTAL RESIDENTIAL BEDROOMS	454	443	597
Employee Housing - Dormitory	204	0	0
Employee Housing - Studio	48	0	0
TOTAL EMPLOYEE HOUSING BEDS	252	0	0
NON-RESIDENTIAL BUILDING SQUARE FEET			
Retail	5,500	14,900	8,221
Restaurant / Food & Beverage	7,000	15,650	8,471
Hotel Common Area	15,692	17,543	33,320
Mountain Adventure Camp	90,000	0	0
Ski Services & Other Amenities	32,500	20,000	10,000
Transit Center	4,000	0	0
Neighborhood Market	0	5,000	0
Shipping / Receiving	0	0	15,000
TOTAL NON-RESIDENTIAL BLDG. SQ. FT.	154,692	73,093	75,012
Cumulative Units	242	501	850
Cumulative Bedrooms	454	896	1,493
Cumulative Employee Beds	252	252	252
Cumulative Non-Residential Square Feet	154,692	227,785	302,797

Source: SVRE and HEC July 2014.

land

To estimate the assessed value of fractional cabins HEC assumed the same ratio between a condo hotel and fractional cabin as SVRE, resulting in a fractional cabin price of \$364,000 per share. With 7 shares per cabin the total assessed value of a fractional cabin is estimated at \$2,550,000.

To estimate the assessed value of the employee housing HEC averaged the current assessed value per building square foot of three affordable housing projects - Sawmill Heights built in 2007 in Northstar, Kings Beach Now housing project on Chipmunk St built in 2012, and Hopkins Village units built in 2009. The calculation, shown in Appendix **Table A-9**, estimates assessed value of \$11,900 per dormitory bed and \$33,400 per studio bed.

Non-residential assessed value per building square foot was estimated to range between \$100 for shipping and receiving and \$450 per square foot for retail. Non-residential values are based on current commercial building listings in Truckee, Alpine Meadows, and Tahoe City as shown in **Table A-10**.

General Utility Assumptions

The revenue projections are based on current fee and rate schedules of SVPSD. **Tables A-11 through A-13** document current fees and rates by service and customer type. Current fee and rate schedules for all services are assumed to increase 3.5% per year, as documented in **Table A-14**.

Project Utility Assumptions

Water Meters

To estimate new revenues to the water fund HEC had to estimate how many new water meters would be needed to serve the Project, and size of the meters. **Table A-15** shows HEC's estimates. The estimates are based on number of buildings and non-residential spaces within the buildings. In total it is estimated that the Project will require an additional 89 water meters, of which 40 for residential use, 38 for commercial use, and 11 for irrigation use.

Sewer Fixtures

Sewer fixture count is assumed to be 22 or less for all new residential units, per SVPSD code. All new residential units will therefore only pay a hook-up fee for sewer. Non-residential sewer fixture count was estimated by HEC using the SVPSD code for number of sewer fixture units by fixture type and Aqua Development Group 2012 estimates of drainage fixture units for the aquatic center. Appendix **Table A-16** shows the estimate of commercial sewer fixtures for the Project. In total 2,979 commercial sewer fixtures are estimated.

Residential Unit Sales

An estimated schedule of residential unit sales is provided in **Table A-17**. Whereas the construction schedules in **Tables A-4 and A-5** are used for one-time fee revenue estimates, the residential unit sales schedule is used for water and sewer rate revenue estimates. All non-residential land uses rate revenues are based on the construction schedule.

Occupied Units, Irrigated Areas, Pools, Buildings, and Water Meters

A summary of key assumptions used in the fee and rate revenue projections are provided in **Table 4** below. **Table A-18** estimates the annual projections through Project buildout.

Table 4
Summary of Projected Occupied Units, Irrigated Square Feet, Pools, Buildings and Water Meters

Unit Projection	Timeframe (Years)		
	5	15	25
Additional Units			
Residential Units Occupied	151	338	361
Employee Beds Occupied	30	140	82
Irrigated Square Feet	185,883	124,995	81,891
Pools / Spas	6	7	9
Buildings	35	7	5
Water Meters	49	33	7
Commercial Sewer Fixtures	2,053	512	413
Cumulative Units			
Residential Units Occupied	151	489	850
Employee Beds Occupied	30	170	252
Irrigated Square Feet	185,883	310,878	392,769
Pools / Spas	6	13	22
Buildings	35	42	47
Water Meters	49	82	89
Commercial Sewer Fixtures	2,053	2,566	2,979

Source: SVRE and HEC July 2014.

others

Water Demand Assumptions

Water demand assumptions for the Project are based on the Water Supply Assessment (WSA) factors in a normal water year. **Table 5** summarizes annual projected water use in years 5, 15, and 25 of Project buildout. At buildout it is projected that an additional 62.3 million gallons (approximately 210 acre feet) of water will be used annually (note, this number represents consumption only, not production which is the total amount of water to be supplied).

Detailed water demand assumptions and projections are provided in **Tables A-19 through A-23**.

Table 5
Summary of Projected Net New Water Demand

Water Demands	Timeframe (Years)		
	0 to 5	6 to 15	16 to 25
Additional Water Use			
	<i>All figures in Gallons</i>		
Residential (includes pools)	6,826,000	14,608,000	15,774,000
Employee Housing	543,000	2,534,000	1,484,000
Non-Residential	14,270,000	3,401,000	3,215,000
Irrigation	2,798,000	1,881,000	1,232,000
Demolished Buildings	(1,182,000)	(630,000)	(4,463,000)
Total Estimated New Water Use	23,255,000	21,794,000	17,242,000
Annual Projected Water Use	23,255,000	45,049,000	62,291,000

Source: HEC.

water

Revenue Projections

Appendix B provides support tables for the revenue projections. Revenue projections include ongoing taxes and rate revenues as well as one-time fees.

Ongoing revenues include property taxes, which primarily support fire, but may also support water and sewer operations and maintenance costs, including replacement of facilities and equipment serving existing customers. Water and sewer are enterprise funds primarily funded with rate revenue. One-time fees are paid at building permit issuance to support additional capital (infrastructure) associated with serving the property. Fees are paid for new customers receiving fire, water and sewer service. A projection of all net new Project revenue by year through buildout is provided in **Table B-1**.

Ongoing Revenues

Property Taxes

The Project is located in Tax Rate Area (TRA) 091-001. The SVPSD receives approximately 25.72% of the total property tax in TRA 091-001 after adjustments for the Educational Revenue Augmentation Fund (ERAF). Of this total, SVPSD receives 22.03% from Placer County Tax Code 22500 (Squaw Valley PSD) and 3.69% from Tax Code 25000 (Squaw Valley PSD Z1).

ERAF reduces property tax revenues received by the District by 7.78% in Squaw Valley PSD (Tax Code 22500) and 41.83% of the property tax allocation in Squaw Valley PSD Z1 (Tax Code 25000) per the Placer County Auditor-Controller.

Table B-2 shows the allocation of the 1% property tax between receiving agencies for fiscal year 2013-14 prior to adjustments for the Educational Revenue Augmentation Fund (ERAF).

Total Project assessed value using sales price shown in **Table A-7** is projected in **Table B-3**. Existing assessed value is deducted from those properties that will be demolished or improved in the Project area. Existing assessor roll values are provided in **Table B-4**. Total current roll value in the Project area is \$29.57 million. Of that total approximately \$1.21 million will be unaffected by the Project as the associated parcels will not be developed.

A projection of net new assessed value and property taxes by year is calculated in **Table B-5**. The model assumes that property values/sales prices will appreciate by the historical last 25-year average annual California Consumer Price Index percentage increase of 2.64% (1989 to 2014) each year. Per Proposition 13 properties are assessed their market value upon sale and are increased 2.00% annually in value between sales transaction years. The annual increase in assessed value of existing properties on the Project site therefore increases 2.00% each year until the structures are demolished or modified. Similarly, assessed value of all new built/sold Project properties are also inflated 2.00% per year.

Assessed values may temporarily decrease during recession periods per Proposition 8; assessed values may also increase beyond those shown in the model due to property turnover and/or greater appreciation of property values than assumed in the financial model. Given uncertainty in the long-term economic outlook, timing of Project development, and property turnover, the financial model as described above provides as conservative estimate of assessed values and property tax revenue projection.

Table 6 summarizes projected net new assessed value and property taxes to SVPSD from the Project. By year 5 of development the Project is estimated to generate an additional \$289.67 million in assessed value.

Table 6
Summary of Projected Assessed Value and Property Taxes

Property Tax	Year 5	Year 15	Year 25
Net New Assessed Value (increased 2% per year)	\$289,676,000	\$377,311,000	\$660,495,000
Estimated Annual Assessed Value	\$289,676,000	\$666,987,000	\$1,327,482,000
Squaw Valley PSD Property Tax	\$638,000	\$1,469,000	\$2,925,000
Squaw Valley PSD Z1 Property Tax	\$107,000	\$246,000	\$490,000
Total Annual Property Tax Revenue	\$745,000	\$1,715,000	\$3,415,000

Source: HEC.

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After accounting for SVPSD's share of property tax and adjusting for the ERAF shift, net additional Project property tax to SVPSD is estimated at \$0.74 million. By year 15 the Project is estimated to generate an additional \$666.99 million in assessed value and \$1.71 million annually in property taxes. At buildout the Project is estimated to generate an additional \$1,327.48 million in assessed value and \$3.41 million annually in property taxes to SVPSD.

Water Revenues

All water customers pay a base rate for service to their property. Residential, commercial and irrigation customers also pay for metered water use. Pools/spas pay a flat annual rate. **Table B-6** summarizes annual projections of water rate revenue by customer type. The calculations are detailed in **Table B-7**. The water rate revenues are reduced by the revenue from existing buildings and portions of buildings that will be removed as part of the Project. The existing water rate structure is assumed to be in place through buildout; however, the rates are assumed to increase 3.5% per year.

Net new Project water revenues are estimated at approximately \$258,000 annually by year 5, \$711,000 by year 15, and \$1.47 million at Project buildout as shown in **Table 7**.

Table 7
Estimated Project New Water and Sewer Rate Revenues

Water and Sewer Rate Revenue	Estimated Annual Revenue in Year		
	5	15	25
WATER			
Base Revenue	\$74,000	\$244,000	\$431,000
Use Revenue	\$199,000	\$227,000	\$362,000
less existing Building Revenue	(\$15,000)	(\$18,000)	(\$32,000)
Total New Water Revenue	\$258,000	\$453,000	\$761,000
Annual Water Revenue	\$258,000	\$711,000	\$1,472,000
SEWER			
Base Revenue	\$85,000	\$208,000	\$330,000
Use Revenue	\$165,000	\$35,000	\$47,000
less existing Building Revenue	(\$15,000)	(\$15,000)	(\$30,000)
Total New Sewer Revenue	\$235,000	\$228,000	\$347,000
Annual Sewer Revenue	\$235,000	\$463,000	\$810,000
 Annual New Rate Revenue	 \$493,000	 \$1,174,000	 \$2,282,000

Source: HEC

rate rev

Sewer Revenues

All sewer customers pay a base rate for service. Non-residential customers also pay for sewer based on the amount of water they use. Note that all irrigation is separately metered therefore all water consumed is conveyed to the sewer system. **Table B-8** summarizes annual projections of sewer rate revenue by customer type. As with water, revenues are reduced by the revenue from existing buildings and portions of buildings that will be removed as part of the Project, and the existing rate structure is assumed to be in place through buildout. The sewer rates are assumed to increase 3.5% per year. Detailed calculations are provided in **Table B-9**.

Net new Project revenues shown in **Table 7** are estimated at approximately \$235,000 by year 5, \$463,000 by year 15, and \$810,000 at Project buildout.

One-Time Revenues

Water

Water connection fees include a meter connection fee, plant availability charge, and fire plant availability charge. HEC has assumed that the Project developer will install all meter and associated facilities and will therefore not be required to pay the meter connection fee. The plant availability charge is calculated in **Table B-10**. The model assumes that the plant availability charge is paid on net new maximum day demands.

The Project is estimated to generate approximately \$11.81 million in water fees. The fees are inflated 3.5% per year. The fire plant availability charge cannot be estimated at this time because it is calculated based on every 500 gpm required of the fire protection system. Requirements of the fire protection system will not be developed until building plans are further along in the development process.

Sewer

Sewer connection fees include a hook-up fee and fixture unit fee. Since residential units only pay a fixture unit fee if they generate more than 22 equivalent plumbing fixture units and all the Project residential units are estimated to use less equivalent plumbing fixture units, residential sewer connection fees only comprise hook-up fees. Non-residential buildings will pay both hook-up and fixture unit fees. The commercial fixture unit estimate is based on the assumptions shown in **Table A-16**.

Table B-11 shows the calculation of sewer connection fees by year through buildout. The fee per fixture unit is \$55, and is inflated 3.5% per year in the model. The Project is estimated to generate approximately \$2.02 million in sewer fees.

Fire

New buildings pay a fire impact fee of \$1,080 per 1,000 square feet of commercial space and \$500 per bedroom. Estimated fire fees by year through buildout are calculated in **Table B-12**. Fire fees are also inflated 3.5% per year and the Project is estimated to generate approximately \$1.62 million in fire fees.

Table 8 summarizes the water, sewer, and fire fee revenue estimates.

Table 8
Estimated Project Water, Sewer, and Fire Fee Revenues

Fee Revenue	Timeframe (Years)			Total
	0 to 5	6 to 15	16 to 25	
WATER				
Meter Connection Fees	\$0	\$0	\$0	\$0
Residential PAC	\$2,177,000	\$2,625,000	\$5,094,000	\$9,896,000
Commercial PAC	\$579,000	\$511,000	\$828,000	\$1,918,000
Fire PAC	\$0	\$0	\$0	\$0
Total Water Fees	\$2,756,000	\$3,136,000	\$5,922,000	\$11,814,000
SEWER				
Residential Hookup Fees	\$341,000	\$420,000	\$815,000	\$1,576,000
Commercial Hookup Fees	\$131,000	\$50,000	\$51,000	\$232,000
Commercial Connection Fees	\$125,000	\$39,000	\$44,000	\$208,000
Total Sewer Fees	\$597,000	\$509,000	\$910,000	\$2,016,000
FIRE				
Residential Hookup Fees	\$302,000	\$296,000	\$575,000	\$1,173,000
Commercial Connection Fees	\$183,000	\$113,000	\$155,000	\$451,000
Total Fire Fees	\$485,000	\$409,000	\$730,000	\$1,624,000
Total Impact Fees	\$3,838,000	\$4,054,000	\$7,562,000	\$15,454,000

Source: HEC.

fee rev

Conclusions

This analysis has estimated total new property tax, rate and fee revenue generation to SVPSD from development of the Project over a 25-year time period. The revenue estimates are based on many assumptions that should be checked and revised as necessary to reflect current knowledge and assumptions. As such, the financial model that has been developed for this analysis is a tool that SVPSD can continue to use and update for planning purposes.

The next step in the planning process is to compare the estimated revenues with estimated costs. Estimated costs include infrastructure costs and operations and maintenance costs of the fire, water, and sewer services. Infrastructure costs will be used to determine whether

the water and sewer connection fees and fire impact fees need to be adjusted. The proposed development agreement between the SVPSD and the developer will address the developer's responsibilities for required infrastructure improvements.

Future operations and maintenance costs to service the Project will be compared with revenue projections to determine if rates need to be increased for sewer and water service beyond the 3.5% per year assumed in this analysis. The combined costs of fire, sewer and water operations will be compared with current existing revenue sources to determine if additional revenue sources are needed. Costs will include system rehabilitation costs for the new infrastructure associated with the Project.