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Town of Killington Water System Feasibility Study

Phase II Needs Assessment

Public Information Meeting

October 23, 2012

Presented by

Joe Duncan, PE

Nathan Pion, EI

Phase I Summary

- Evaluated water supply sources
- Conducted needs assessment/survey
- Identified sporadic water needs with limited interest
- Town recommended evaluating partnering with SP Land (Phase II)

Phase II Summary

- Identified SP Land's proposed water system
- Evaluated Town water needs
- Developed proposed water system to service SP Land's proposed development and Town area along Killington Road to West Hill Road intersection
- Next step is to develop costs for Town to construct, own, and operate the proposed water system

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Proposed Water System

- Construct new water system (2016+)
  - Valley Wells as water source
  - High service (Sports Hill) pump station with 16” main to deliver water to top of mountain
  - 750,000 gallon storage tank
  - Transmission mains into resort and into Town along Killington Road to the West Hill Road intersection

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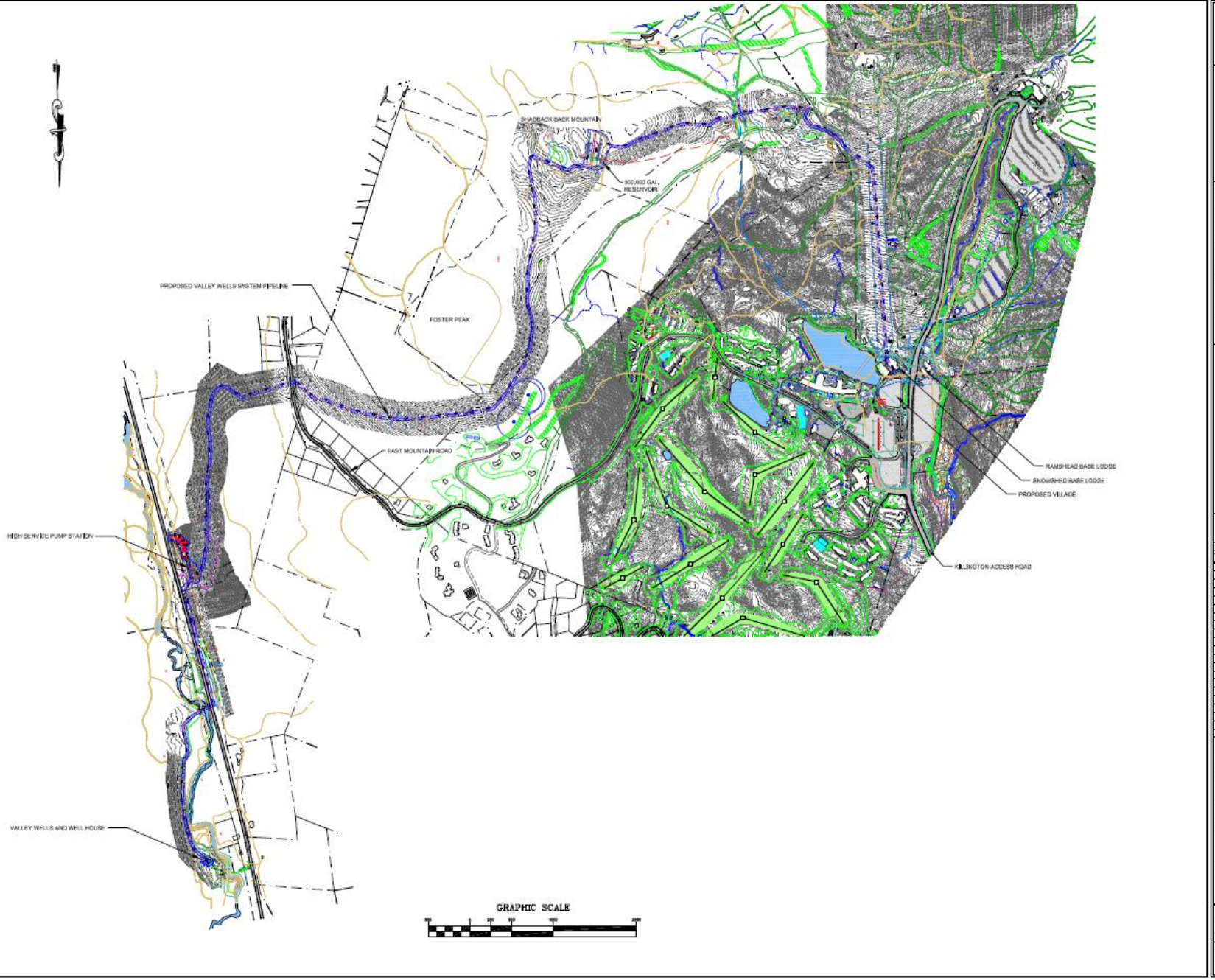

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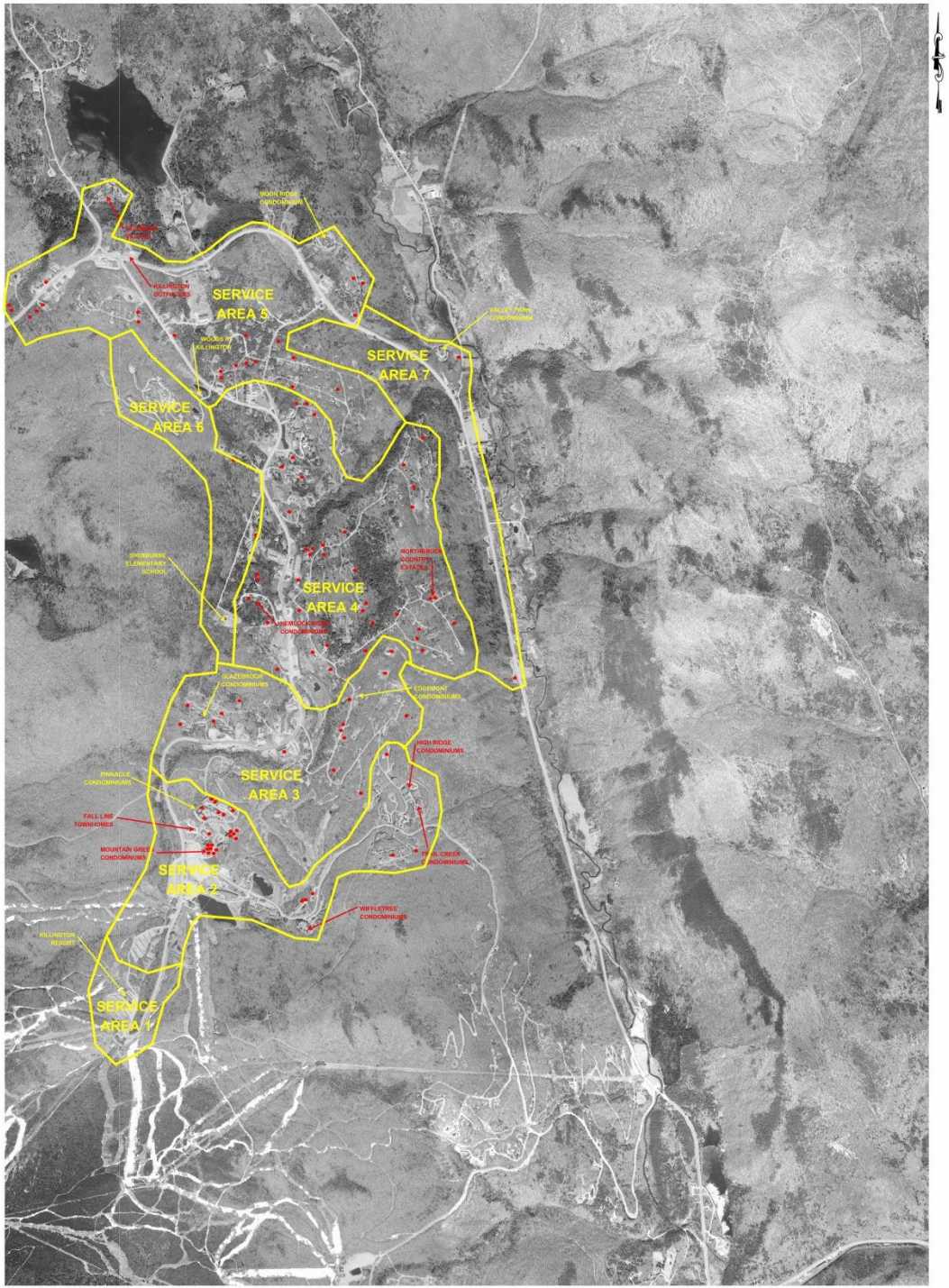
SP LAND KILLINGTON

KILLINGTON VILLAGE WATER SYSTEM
VALLEY WELL FIELD PROJECT
OVERALL PLAN

DRAWN BY:
DATE:
CHECKED BY:
DRAWING NO:
VW OA-1

FIGURE 2
Google Earth™ Image Showing Approximate Study Area Boundaries,
Town of Killington Water System Feasibility Study, Killington, Vermont



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Estimated Water Demands and ERUs

	Initial Year (2017) w/Connected Users Only		Initial Year (2017) w/800,000 gpd SP Land Allocation		Full-Build Out (2047)	
Service Area	**Estimated ADD (gpd)**	**No. of ERU's**	**Estimated ADD (gpd)**	**No. of ERU's**	**Estimated ADD (gpd)**	**No. of ERU's**
1	250,000	1,190	800,000	3,809	800,000	3,809
2	144,150	686	144,150	686	268,290	1,277
3	24,000	114	24,000	114	46,280	220
4	102,765	489	102,765	489	170,695	812
6	2,350	11	2,350	11	2,350	11
Total	**523,265**	**2,490**	**1,073,265**	**5,109**	**1,287,615**	**6,129**

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Overall Cost Estimates

SP Land Phase II	$12.75 million
Town Phase II Add. Needs	$1.0 million
Town Infrastructure	$4.5 million
Total Construction Cost (2016)	**$17.25 million**
Total Project Cost	**$26.0 million**
1st Year O&M Cost	**$275,000**

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Cost Estimates per ERU

Total Project Cost	$26,000,000
Annual Loan Payment (3%, 20 yrs)	$1,747,720
Estimated O&M Cost	$275,000
Total Annual Cost	**$2,022,720**
Total Annual Cost/ERU with Initial Year Connections Only ($2,022,720/2,490 ERUs)	**$812**
Total Annual Cost/ERU with 800,000 gpd allocated to SP Land ($1,747,720/5,109 ERUs + $275,000/2,490 ERUs)	**$452**

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Conclusions

- Water quality and quantity issues exist in the Killington Road area and water competition may be an issue in the future
- A municipal water system is feasible if done in conjunction with the Phase II SP Land development
- Annual user rates could range from $450 to $900 per year depending on how debt service is handled with regards to the proposed SP Land development
- The Town should discuss opportunities and timing with SP Land

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Questions?