CERTIFICATE OF NEED - RESPONSES TO GMCB QUESTIONS

SILVER PINES

DEVELOPMENT OF A MEDICALLY SUPERVISED WITHDRAWAL TREATMENT CENTER FOR INDIVIDUALS WITH SUBSTANCE USE DISORDER IN STOWE, VT

Docket No: GMCB-016-19con

December 17, 2019

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Utilization and Staffing

1. **The application states on page 12 that a number of Vermonters currently get treatment out of state due to a preference for a customized approach with a high clinical provider-to-patient ratio. Please provide data to support this statement.**

Specific quantitative information on the number of Vermonters who receive residential substance use disorders (SUDs) treatment out of state due to a preference for a customized approach with a high clinical provider-to-patient ratio is not publicly available. Our assertion was based on the premise that a customized high staff-to-patient ratio treatment modality is desirable, and that no such services are currently available in Vermont. Thus, we posited that individuals who are seeking such a treatment approach for themselves or their loved ones would currently *have* to obtain these services out of state.

2. **The application states on page 24 that the number of Vermont residents seeking treatment at Silver Pines will be limited because the facility will not be contracting with Medicaid or Medicare. In a table format, provide the total projected number of individuals to be admitted to Silver Pines in Years 1, 2 and 3 of operation; the number/percent that are expected to be Vermont residents; and the number/percent that are expected to be out-of-state residents.**

Current residential treatment programs in Vermont often operate near capacity, so the actual numbers seeking treatment at Silver Pines will depend both on excess demand that is currently unmet and on the number of individuals who choose treatment at Silver Pines in preference to another facility.

Though it is not possible to predict with certainty the number of Vermonters that will seek treatment at Silver Pines, we can make estimates based on the following information. Our formula and conservative projections below take into account health insurance providers, levels of care, and need in the State.

The Treatment Episode Data Set (TEDS) maintained by the Substance Abuse and Mental Health Services Administration (SAMHSA) shows that in 2017, the most recent year for which data are available, there were 9,634 admissions of individuals age 18 and over to substance use treatment programs in Vermont.[1] The TEDS also includes nationwide information on payers, showing that in 2017 a total of 14.8% of treatment episodes were paid for by private insurance or self-pay, the forms of reimbursement that will be accepted at Silver Pines. Through a personal communication with an outpatient SUDs treatment program in Vermont with a consecutive sample of 137 patients, twenty-five of whom needed medically supervised withdrawal (MSW) or residential treatment, we estimated the percent of individuals in need of the level of care offered at Silver Pines will be 18% of the total number receiving some level of SUD treatment.

[1] Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. *Treatment Episodes Data Set (TEDS): 2017*. SAMHSA: Rockville, MD.

The calculations are as follows:
9,634 (number of people age 18 or older who were admitted to SUD treatment in VT in 2017)[2]
multiplied by 14.8% (paid by private insurance or self-pay, from national data)[3] = 1,426
multiplied by 18% (people in need of MSW and/or residential treatment) = 257

Therefore, we expect 257 eligible/potential patients per year.

We have conservatively estimated that only a minority of individuals will be from Vermont initially due to the presence of larger and longer-established programs, but among treatment-seeking individuals who meet admission criteria, preference will be given to Vermont residents.

We then assume that the number of potential patients that are Vermont residents that will choose Silver Pines will increase over time as the reputation and visibility of Silver Pines grows. We assume that in Year 1, 15% of the 257 eligible individuals will choose Silver Pines; 25% will do so in Year 2; and, 35% will do so in Year 3. Therefore, the expected number of patients are the following:

- Percent who will choose Silver Pines in Year 1 is 15% = 257*15% = 39
- Percent who will choose Silver Pines in Year 2 is 25% = 257*25% = 64
- Percent who will choose Silver Pines in Year 3 is 35% = 257*35% = 90

	Total Expected Individuals Admitted	Expected Vermont Residents	% of SP Patient Population	Expected Out-of-State Residents	% of SP Patient Population
Year 1	365	39	10.7%	326	89.3%
Year 2	660	64	9.7%	596	90.3%
Year 3	921	90	9.8%	831	90.2%

3. The application states on pages 16 and 21 that the facility will have the highest staff-to-patient ratio in the state. The application also states on page 5 that Silver Pines proposes to offer one of the highest clinical staff-to-patient ratios in the country. Please provide support for these assertions and describe the projected clinical staff-to-patient ratios at Silver Pines for Years 1, 2, and 3 of operation (which should correspond to the staffing and utilization tables submitted as part of the application). Please also describe how these projected ratios compare to other comparable facilities and specify the facility(s).

Data on local and nationwide clinical staff-to-patient ratios at MSW and residential SUDs facilities is not publicly available from peer-reviewed sources as programs do not customarily track or report this information.

[2] Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. *Treatment Episodes Data Set (TEDS): 2017*. SAMHSA: Rockville, MD.
[3] Ibid.

Our assertion that Silver Pines proposes to offer one of the highest clinical staff-to-patient ratios in the country is based on our contacts with a number of in- and out-of-state MSW and residential programs. As such, these ratios are estimates from admissions' staff at the facilities we contacted, and it is worth noting that there was often no agreed-upon definition of what constitutes a "clinical" staff member during these conversations.

Nevertheless, what we discovered from our research is the clinical staff-to-patient ratio that Silver Pines is committed to providing to ensure excellent medical, clinical and psychiatric care is higher than other facilities in Vermont (where information was available) and often equal to the other premier addiction treatment centers in the country.

Provider	**State**	**Clinical Staff-to-Patient Ratio**
Silver Pines Year 1 *(6-14 census)*	Vermont	2 to 1
Silver Pines Year 2 *(16-22 census)*	Vermont	1.7 to 1
Silver Pines Year 3 *(24-28 census)*	Vermont	1.3 to 1
Valley Vista	Vermont	1 to 3.7
Serenity House	Vermont	1 to 3.4
Brattleboro Retreat	Vermont	Unknown
Caron	Pennsylvania	Unknown
Hazelden Betty Ford	Minnesota	Unknown
Mountainside	Connecticut	1 to 4
Silver Hill	Connecticut	Unknown
Pine Tree Recovery Center	Maine	1 to 2
McLean Fernside	Massachusetts	1.5 to 1
McLean Borden Cottage	Maine	1.5 to 1
New England Recovery Center	Massachusetts	1 to 4.2
Green Mountain Treatment Center	New Hampshire	1 to 2.5
Hanley Center	Florida	1 to 1
Ascendant New York	New York	2 to 1
Cliffside Malibu	California	2 to 1

4. Provide detailed information on how and where staff will be recruited.

Our Human Resources Specialist will lead talent acquisition by utilizing many different avenues to recruit Silver Pines' staff. Recruitment will be primarily focused in Vermont, New Hampshire, and New York using various channels including, but not limited to, newspaper advertising in various publications (e.g. Burlington Free Press, Seven Days, VT Digger, Barre Montpelier Times Argus, Stowe Reporter, Valley News, etc.), online job search engines (Indeed.com, Monster.com, Ziprecruiter.com), local job fairs, open houses with on-the-spot interviews and

word of mouth. In addition, if needed, we will contract with recruitment firms that specialize in health care staffing and offer sign-on bonuses and relocation fees for new employees.

5. On page 2 of the Lease, please identify and describe the positions to be held by non-U.S. residents through the H2B program and J-1 Visa programs. Explain the potential impact on the project if these positions cannot be filled by non-resident workers.

All employees will have either U.S. permanent residency (green cards) or U.S. citizenship. We do not anticipate needing to hire any non-U.S. residents.

6. Specify the qualifications for the Aftercare Specialists and the Recovery Specialists positions.

Aftercare Specialists will have a minimum of an Associate's Degree and 1-2 years' experience in the substance use treatment field. Their main job responsibilities will include:

- Coordinating the individual's care with external providers and community resources, including family members, primary care providers (PCPs), psychiatrists, outpatient programs, legal aids, family interventionists, university administrative staff, and employee assistance program representatives.
- Reviewing individual's discharge records from previous treatment providers and contacting emergency contacts, family members, former providers, and referral sources.
- Collaborating with the individual and Silver Pines' multi-disciplinary team to create, design, and schedule a comprehensive plan, which takes into account the housing and therapeutic needs of the individual post-discharge to sustain recovery.

Recovery Specialists will have a minimum of a high school diploma or GED, a minimum of 1 years' experience in the substance use treatment field, and be or be applying to be a Vermont Certified Recovery Coach. Their main job responsibilities will include:

- Addressing the day-to-day non-therapeutic needs of individuals using a calm, professional, and friendly manner.
- Facilitating 12-step support, life skills, and wellness groups and coordinating related outings.
- Modeling and encouraging pro-social behaviors such as peer support meeting etiquette, time management, appropriate language, and dress.
- Welcoming new admissions by ensuring that all individuals have welcome materials and their accommodations are clean and orderly.
- Performing baggage and property searches and checking in personal property
- Ensuring safety by monitoring individuals' whereabouts and performing bed checks to maintain an accurate patient census.
- Assisting with milieu activities and developing and maintaining professional interpersonal relationships with individuals to support their recovery.
- Transporting individuals for admission, discharge, external appointments, community groups, etc.

7. Provide more detailed information about the "medically intensive treatment" to be provided by the Medical Assistants and the qualifications required for this position.

Medically intensive treatment will be provided by our entire multi-disciplinary team, including physicians, nurses, medical assistants, counselors, aftercare specialists and recovery specialists.

Medical Assistants will be certified nursing assistants that have completed training to dispense medications while working under the supervision of a Registered Nurse. Specifically, the Medical Assistants will be responsible for:

- Assisting nursing staff in performing initial history and physical exams.
- Monitoring, reporting, and documenting individuals' blood pressure, pulse, respirations, temperature and symptoms of withdrawal.
- Monitoring, reporting, and documenting any change in individuals' medical and psychological status.
- Monitoring, reporting, and documenting all of the individuals' activity and behavior.
- Maintaining alertness for signs and symptoms of emerging medical or psychiatric complications, and communicating these to a supervisor and other relevant members of the treatment team.
- Safely administering medications to individuals at the medication window or in individuals' rooms as needed.
- Assisting individuals with activities of daily living as appropriate.
- Attending to any day-to-day health situations that may arise among clients.
- Implementing appropriate MSW protocols and other policies and procedures.
- Performing laboratory specimen collections and drawing blood.
- Helping to identify short- and long-term individual care issues to be addressed during treatment at Silver Pines and after discharge.
- Facilitating health-related psychoeducation groups.

Clinical Programming

8. Provide a detailed description of the medical, clinical and adjunct services to be integrated into each episode of treatment. Beginning with programming for the first hour of an individual's day through the last hour, outline what a typical day in treatment will include, clearly identifying the number of hours of clinical services, medical services, and all other services to be provided on and off site each day.

Time	Activity	Staff Facilitator
7:00am	Wake-up/Morning Medication Administration	Recovery Specialist/Nurse
8:00am	Breakfast	Recovery Specialist
9:00am	Morning Process Group/Mindfulness	Clinician
10:00am	Evidenced-Based Group Therapy	Clinician
11:00am	Wellness (TaiChi/Qigong, Massage, Meditation, Acupuncture)	Contracted
12:00pm	Lunch	Recovery Specialist
1:00pm	Individual or small group break-out	Clinician
2:30pm	Recovery Skills/Aftercare Planning	Clinician/Aftercare Specialist
3:30pm	Psychoeducation	Clinician
4:30pm	Free Time	Recovery Specialist
5:00pm	Dinner	Recovery Specialist
6:00pm	Support and Recovery meeting AA/NA, Smart Recovery, etc.	Recovery Specialist
7:00pm	Assignment Time	Recovery Specialist
8:00pm	Open Gym/Free Time	Recovery Specialist
9:00pm	Evening Process Group/Medication Administration	Recovery Specialist
10:00pm	Meditation/Sleep	Recovery Specialist/Nurse

*Note: weekends will incorporate family programming and visitations.
**Admissions and discharges occur throughout the day.

Total clinical programming hours per day: 6.

9. The application states on page 6 that whereas the current paradigm in addition treatment leads to variable results and frequent relapses, the model that will be offered at Silver Pines will lead to better outcomes in terms of increased abstinence and decreased relapse rates, which will in turn yield cost savings for the healthcare system through, for example, potentially fewer emergency department visits. Please provide support for the assertion that the model of care offered at Silver Pines leads to better outcomes in terms of increased abstinence and decreased relapse rates.

High rates of relapse after acute treatment have long been recognized for a variety of substances ranging from alcohol to opioids to nicotine.[4] [5] Addictions are now widely recognized as chronic, relapsing-remitting conditions for which longitudinal treatment is important, and in the case of opioid use in particular, ongoing pharmacotherapy is a key component of effective treatment.[6] Emphasis at Silver Pines will therefore be placed on engaging individuals in planning for ongoing treatment, including psychosocial modalities and, in the case of opioid use disorder (OUD), maintenance pharmacotherapy with either buprenorphine/naloxone or naltrexone. Pharmacotherapies such as naltrexone or acamprosate will also be encouraged for patients with alcohol use disorder based on their demonstrated efficacy for promoting abstinence and decreasing heavy drinking.[7]

In all cases, Silver Pines' staff will work to locate treatment resources in individuals' home areas, customize treatment plans to match the available options (e.g. the choice between buprenorphine and naltrexone for OUD may be influenced by availability of waivered prescribers for the former), and make arrangements for ongoing medical and psychosocial treatments during admission to Silver Pines. For those beginning pharmacotherapy, this will include an initial appointment with a prescriber able to continue the chosen medication(s) after discharge. Staff at Silver Pines will also work to connect individuals with ongoing psychosocial treatment, which has been shown particularly important for promoting abstinence from substances for which effective pharmacotherapies are lacking, such as cocaine and methamphetamine.[8]

Available evidence strongly supports such a longitudinally oriented approach. In the case of OUD, numerous studies have demonstrated increased retention in treatment and decreased rates of relapse with ongoing treatment that includes pharmacotherapy, as well as reductions in

[4] Hunt WA et al. 1971. Relapse rates in addiction programs. Journal of Clinical Psychology 27:455-456.
[5] Weiss RD et al. 2011. Adjunctive counseling during brief and extended buprenorphine-naloxone treatment for prescription opioid dependence. Archives of General Psychiatry 68:1238-1246.
[6] Fiellin DA et al. 2014. Primary care-based buprenorphine taper vs maintenance therapy for prescription opioid dependence: a randomized clinical trial. JAMA Internal Medicine 174:1947-1954.
[7] Kranzier HR, Soyka M. 2018. Diagnosis and pharmacotherapy of alcohol use disorder: a review. JAMA 320:815-824.
[8] Dutra L et al. 2008. A meta-analytic review of psychosocial interventions for substance use disorders. American Journal of Psychiatry 165:179-187.

overdose and all-cause mortality.[9] [10] [11] Economic studies have also demonstrated decreased total medical costs for patients with OUD engaged in ongoing pharmacotherapy.[12] [13]

For patients with OUD planning to begin naltrexone, the requirement for a week of initial abstinence from all opioids poses a substantial challenge, with rates of dropout from treatment during this time in outpatient settings approaching 25% in clinical trials.[14] The treatment approach at Silver Pines will allow intensive monitoring, support, and symptomatic treatment of opioid withdrawal during this period to improve on the outcomes demonstrated in outpatient practice. While controlled trials of inpatient versus outpatient initiation of naltrexone have yet to be conducted, pharmacotherapy of withdrawal symptoms has demonstrated efficacy in decreasing symptoms[15] and concurrent engagement in evidence-based psychosocial therapies has been demonstrated to enhance retention,[16] and Silver Pines will utilize both strategies to help individuals initiating naltrexone remain in treatment throughout the initiation process. Protocols at Silver Pines will also be continually updated as new evidence and practices emerge, such as more rapid procedures for initiating naltrexone, which are promising but still investigational at present.[17]

Treatment at Silver Pines will also include comprehensive psychiatric assessment by trained mental health clinicians and psychiatrists, and initiation of behavioral and pharmacologic treatments where indicated. Nationwide surveys show that nearly half of individuals with SUDs also have one or more co-occurring psychiatric disorders, such as major depression or generalized anxiety,[18] and clinical trials demonstrate that effective treatment of these conditions can promote recovery and increase rates of abstinence.[19]

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[9] Sordo L et al. 2017. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ 357:1550.
[10] Evans E et al. 2015. Mortality among individuals accessing pharmacological treatment for opioid dependence in California, 2006-10. Addiction 110:996-1005.
[11] Mattick RP et al. 2014. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Database Syst Rev CD002207.
[12] Mohlman MK et al. 2016. Impact of medication-assisted treatment for opioid addiction on Medicaid expenditures and health services utilization rates in Vermont. Journal of Substance Abuse Treatment 67:9-14
[13] Baser O et al. 2011. Cost and utilization outcomes of opioid-dependence treatments. American J Managed Care 17s8:s235-s248.
[14] Lee JD et al. 2017. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. Lancet 391:301-318.
[15] Gowing L et al. 2016. Alpha2-adrenergic agonists for the management of opioid withdrawal. Cochrane Database of Systematic Reviews CO002024.
[16] Amato L et al. 2011. Psychosocial and pharmacological treatments versus pharmacological treatments for opioid detoxification. Cochrane Database of Systematic Reviews CD005031.
[17] Gowing L et al. 2017. Opioid antagonists with minimal sedation for opioid withdrawal. Cochrane Database of Systematic Reviews CD002021.
[18] Substance Use and Mental Health Services Administration (SAMHSA). 2018, Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health. HHS Publication No. SMA 18-5068.
[19] Nunes EV, Levin FR. 2004. Treatment of depression in patients with alcohol or other drug dependence: a meta-analysis. JAMA 291:1887-1896.

10. Detail the withdrawal management protocols for each substance addressed at Silver Pines.

Management of Opioid Withdrawal Protocol[20] [21] [22] [23] [24] [25]

General considerations

1. Non-opioid and agonist/partial agonist strategies both have support for decreasing withdrawal symptoms.
2. Agonist/partial agonist treatment has evidence of greater symptom relief and retention, but non-opioids may be preferred when transitioning to antagonist treatment.
3. Current recommendations call for 7 days without opioids before starting naltrexone; briefer protocols have been studied but are not yet generally recommended.
4. Buprenorphine and methadone both have strong supporting evidence, with buprenorphine potentially safer on pharmacologic grounds and more available legally.
5. Optimal taper duration is not clearly established, and relapse rates are high regardless of duration without ongoing pharmacotherapy.
6. Supervised withdrawal is not recommended unless the patient plans to start antagonist treatment or declines ongoing pharmacotherapy (after discussion of risks).

Suggested protocol (partial agonist)

1. Score Clinical Opiate Withdrawal Scale (COWS) and check vitals every 4 hours
2. If score is 8 or more:
    a. Give buprenorphine/naloxone (bup/nx) 4 mg sublingual (SL)
    b. Repeat every 2 hours until score < 8
3. Score COWS every 4 hours for remainder of day 1
    a. Give bup/nx 4 mg SL if 8 or more
    b. Maximum total 12 mg for the day
4. Score COWS on day 2:
    a. Give total from day 1 if score < 8
    b. Give day 1 total + 4 mg if score is 8 or more
5. Score COWS every 4 hours for remainder of day 2
    a. Give bup/nx 4 mg SL if score is 8 or more
    b. Maximum total 16 mg for the day

[20] American Society of Addiction Medicine (ASAM). 2015. The ASAM National Practice Guideline for the Use of Medication in the Treatment of Addiction Involving Opioid Use. American Society of Addiction Medicine: Chevy Chase, MD.
[21] Gowing et al. 2017a. Buprenorphine for managing opioid withdrawal. Cochrane Database of Systematic Reviews CD002025.
[22] Gowing et al. 2017b. Opioid antagonists with minimal sedation for opioid withdrawal. Cochrane Database of Systematic Reviews CD002021.
[23] Gowing et al. 2014. Alpha2-adrenergic agonists for the management of opioid withdrawal. Cochrane Database of Systematic Reviews CD002024.
[24] Sevarino. 2019. Medically supervised opioid withdrawal during treatment for addiction. UpToDate 31.0, Topic 7808.
[25] Substance Abuse and Mental Health Services Agency (SAMHSA). 2018. Medications for Opioid Use Disorder: TIP Series 63. HHS Publication No. (SMA) 18- 5063. Substance Abuse and Mental Health Services Administration.

6. Taper over the next 7 days, based on day 2 total
    a. 16 mg: 12 – 8 – 8 – 4 – 4 – 2 – 2
    b. 12 mg: 8 – 8 – 4 – 4 – 2 – 2 – 0
    c. 8 mg: 4 – 4 – 4 – 2 – 2 – 2 – 0
    d. 4 mg: 4 – 2 – 2 – 2 – 2 – 0 – 0
7. Supplement as needed with symptomatic adjuncts (per non-opioid protocol)

Suggested protocol (non-opioid)

1. Clonidine 0.1-0.3 mg PO q 6 hours PRN COWS > 4
    a. 5 or more: 0.1 mg
    b. 13 or more: 0.2 mg
    c. 25 or more: 0.3 mg
    d. Hold for SBP < 90
2. Hydroxyzine 50 mg PO q 6 hours PRN anxiety or insomnia
3. Ibuprofen 400 mg PO q 6 hours PRN musculoskeletal pain
4. Loperamide 4 mg PO, then 2 mg per loose stool (maximum 16 mg/day)
5. Ondansetron 4 mg SL q 6 hours PRN nausea or vomiting

Management of Alcohol Withdrawal Protocol[26] [27] [28] [29] [30] [31] [32] [33] [34]

General Considerations

1. Benzodiazepines are the best-supported agents for relieving symptoms and preventing complications.
2. Adjuncts and alternatives have limited evidence, mainly when response to IV benzodiazepines is inadequate; none are suggested in the protocol below since transfer to acute medical care would be appropriate before reaching this point.
3. Symptom-triggered approaches have solid evidence of producing similar outcomes with less medication and briefer treatment.
4. Evidence on choice of benzodiazepine is mostly lacking; diazepam, chlordiazepoxide, and lorazepam are evidence-supported and commonly used and recommended.

[26] Amato et al. 2010. Benzodiazepines for alcohol withdrawal. *Cochrane Database of Systematic Reviews* CD005063.
[27] Caputo et al. 2019. Diagnosis and treatment of acute alcohol intoxication and alcohol withdrawal syndrome: position paper of the Italian Society on Alcohol. *Internal and Emergency Medicine* 14:143-160.
[28] Eyer et al. 2011. Risk assessment of moderate to severe alcohol withdrawal—predictors for seizures and delirium tremens in the course of withdrawal. *Alcohol and Alcoholism* 46:427-433.
[29] Gortney et al. 2016. Alcohol withdrawal syndrome in medical patients. *Cleveland Clinic Journal of Medicine* 83:67-79.
[30] Long et al. 2017. The emergency medicine management of severe alcohol withdrawal. *American Journal of Emergency Medicine* 35:1005-1011.
[31] Maldonado et al. 2015. Prospective validation study of the prediction of alcohol withdrawal severity scale (PAWSS) in medically ill inpatients: a new scale for the prediction of complicated alcohol withdrawal syndrome. *Alcohol and Alcoholism* 50:509-518.
[32] Mayo-Smith et al. 1997. Pharmacological management of alcohol withdrawal: a meta-analysis and evidence-based practice guideline. *JAMA* 278:144-151.
[33] Wood et al. 2018. Will this hospitalized patient develop severe alcohol withdrawal syndrome? *JAMA* 320:825-833.
[34] Schuckit MA. 2014. Recognition and management of withdrawal delirium (delirium tremens). NEJM. 371:2109-2113.

5. Most guidelines suggest longer-acting benzodiazepines as first choice for potentially more sustained relief of symptoms.
6. Diazepam has the most rapid onset, which has been suggested to decrease the likelihood of unnecessary repeat administrations.
7. Lorazepam or oxazepam are generally suggested for patients with impaired liver functioning to avoid prolonged sedation.
8. Prediction of complications (i.e. seizures or delirium tremens) is very limited, with validated tools like the Prediction of Alcohol Withdrawal Severity Scale (PAWSS) mainly predicting who develop any withdrawal requiring treatment.
9. Utility of routine oral thiamine is unclear, but patients with alcohol use disorder (AUD) are at increased risk of deficiency and complications, and the costs and risks of supplementing are low.
10. No benefit has been shown for magnesium supplementation.

Suggested Protocol:

1. Score Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA-Ar) and check vital signs every 4 hours
2. If score is 8 or greater:
    a. Give diazepam 10 mg PO (20 mg if score is 15 or more)
    b. Repeat hourly until score < 8
3. Continue until score < 8 for 24 hours
4. Give thiamine 100 mg PO daily for 5 days

Transfer to acute medical facility for any of:

CIWA-Ar score > 35
Temperature > 39 C
Confusion, ataxia, or ophthalmoplegia (visibly dysconjugate or c/o blurring/doubling)
3 consecutive vital signs with SBP > 180 or DBP > 120
3 consecutive CIWA-Ar scores > 20
Hourly monitoring required for > 8 hours

For patients over 65 or with cirrhosis, use lorazepam 2/4 mg instead of diazepam.

<u>Management of Benzodiazepine Withdrawal Protocol</u>

General Considerations
Best practices for management of benzodiazepine withdrawal are less well researched, but guidelines call for a more gradual process, such as decreasing doses by 20% per week.[35] In cases of benzodiazepine withdrawal, Silver Pines will initiate the taper process and arrange for ongoing tapering in an inpatient or outpatient setting in the individual's local area as clinically appropriate. The clinical symptomatology associated with benzodiazepine tapers can be variable. Management is often done on a case-by-case basis. One approach we will take is to strive for initial stabilization on a dose that prevents withdrawal and arrangements for continued taper after discharge.

[35] Department of Veterans Affairs. 2015, VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders, version 3.0.

11. Explain how toxicology testing will be provided.

Each individual that enters treatment at Silver Pines will have our standard toxicology testing, which is completed using a point-of-care (POC) test and a breathalyzer as indicated upon admission. The POC test Silver Pines plans to use is the Alere Toxicology UScreen 12 Drug Panel, which tests for the following:

Substance
COC (Cocaine)
THC (Marijuana)
MOP (Opiates)
AMP (Amphetamine)
MET (Methamphetamine)
BZO (Benzodiazepine)
MTD (Methadone)
OXY (Oxycodone)
MDMA (Ecstasy)
BUP (Buprenorphine)
BAR (Secobarbital)
PCP (Phencyclidine)

*Adulterants are: specific gravity, creatinine and pH.

As needed, urine specimens will be sent out to Aspenti Health lab for confirmatory testing via a courier.

12. Explain in further detail the proprietary, neural network-based treatment planning algorithms using machine-learning principles and the evidence-base for the algorithm. Provide articles from peer reviewed journals that support its efficacy. Explain whether any of the investors/owners of Silver Pines Partners, LLC have an interest in the proprietary neural-network algorithm.

As Drs. Rajkomar, Dean, and Kohane, write in their 2019 review of machine learning and neural networks in medicine:

> *"What if every medical decision, whether made by an intensivist or a community health worker, was instantly reviewed by a team of relevant experts who provided guidance if the decision seemed amiss? Patients with newly diagnosed, uncomplicated hypertension would receive the medications that are known to be most effective rather than the one that is most familiar to the prescriber. Inadvertent overdoses and errors in prescribing would be largely eliminated. Patients with mysterious and rare ailments could be directed to renowned experts in fields related to the suspected diagnosis".*[36]

[36] Rajkomar, A., Dean, J., & Kohane, I. (2019). Machine Learning in Medicine. N Engl J Med, 380, 1347–1358. doi: 10.1056/NEJMra1814259.

As demonstrated in the list of references in Appendix 1, machine learning and neural network models have been used with success in many areas of medicine. The models consist of a set of variables and a series of weights attached to those variables. The relationship among variables is often non-linear. As data are collected, the weights assigned to these variables and the coefficients assigned to the formula connecting those variables can change. The label "neural network models" is based on the analogy of the way relationships among neurons in the human brain are strengthened or weakened based on experience. Dr. Cats-Baril has used machine learning and neural networks to successfully develop a model to stratify patients by risk of imminent suicide.[37] The model was developed by incorporating the advice and experience of a panel of nationally recognized experts. It assists medical staff in Emergency Departments (EDs) in assessing the risk of suicide even if they may have no or limited background in the area. Essentially, an ED medical staff member provides the patient with a tablet computer allowing the patient to answer the questions in the suicide predictive model and obtain a risk score. Based on that score, the model recommends the various customized treatment options that can be initiated by the medical staff taking care of the patient. The model has been demonstrated to be as good as or better in assessing patient risk than experienced, Board-certified psychiatrists.

The power of the machine learning and neural-network models is their ability to learn as the size of the data pool increases. Certain relationships among data points in the model are strengthened and others weakened as more and more data are collected. This model, called SERAS (Systematic Expert Risk Assessment of Suicide), is commercially available through an artificial intelligence software vendor called Voi (www.Voi.com).

Machine-learning models have the capability to closely track and "learn" the patterns of recovery trajectories of very large numbers of patients. This capability can augment the experience and knowledge of health professionals to improve clinical decision making based on the codified experience of many other professionals who have much greater expertise.

At Silver Pines, clinical decisions will be guided and augmented by our proprietary algorithm. As individuals complete the program, we will track the outcomes and add to the "experience" of the algorithm. This will increase the consistency of decision making and care across all health care professionals and staff at our facility.

The neural network model underlying the algorithm that we will use at Silver Pines has been in development for almost two years now. The process began with a meeting of a panel of national experts on SUDs identifying variables to stratify patients in terms of their risk profile. Specific treatment modalities (such as medications, therapies) are then recommended based on that descriptive profile. We plan on using the model to match individuals with the most effective treatment modalities given the individual's specific profile, which includes prior treatment responses. We will customize the treatment program to the profile of every individual based on expert opinion. As new information is continually added into the model's database—individual demographics and type of addiction, the treatments they received, and the resulting outcomes—

[37] Desjardins I., Cats-Baril W., Maruti S., Freeman K., and Althoff R.: Suicide risk assessment in hospitals: an expert system-based triage tool. J Clin Psychiatry 2016; 77: pp. e874-e882.

the model will "learn" and become smarter, refining the classification of risk and the assessment of what are most effective treatment modalities.

The neural network-based treatment planning algorithm will be an integral part of the intellectual property of Silver Pines, LLC. Thus the algorithm will be an asset of the corporation. To keep the algorithm proprietary, we will treat the algorithm as a trade secret rather than seeking a patent for it.

13. The application states on page 21 that Silver Pines will recruit patients throughout Vermont, the Northeast, the Midwest of the U.S. and Quebec, Canada. Given the expansive area from which patients will be recruited, explain in detail how Silver Pines will manage aftercare planning during and after a patient's stay at Silver Pines, specify the period of time Silver Pines will manage aftercare and follow-up activities, and describe the means by which Silver Pines will carry out these activities.

Silver Pines' Aftercare Specialists will develop a referral list of resources from areas in which individuals are presenting from. This list will be a working document that will continually grow and be updated by ongoing research and by individual preferences. The individual will begin to work on their aftercare plan within 24 hours of engagement in treatment, in which Aftercare Specialists will identify providers and/or collaborate with existing providers in the area that the individual will be residing in upon treatment completion.

The Aftercare Specialists will call outpatient providers and schedule appointment dates and times in which the individual will be seen upon discharge. As SUDs are best treated longitudinally along a continuum of care, aftercare plans will likely include a combination of primary care, mental health counseling, medication management, outpatient or intensive outpatient programs, peer-support groups, and familial support. Aftercare specialists will provide assistance coordinating ongoing care to individuals for up to one month after discharge.

With consent, Silver Pines' staff will follow up with individuals after discharge as well as their service providers, family members, loved ones, and sober supports via phone, email, and video conferencing for the periods of time in the table below. These communication modalities can be implemented in the Northeast, Midwest, and Quebec.

	Within 24 hours post-discharge	1 week post-discharge	3 months post-discharge	1 year post-discharge
Telephone calls	X	X	X	X
Tele-counseling		X	as indicated	as indicated
Urine drug tests		as indicated	as indicated	as indicated
Family/Provider Follow-Up	X	X	as indicated	as indicated

14. Provide a detailed explanation of aftercare coordination, including specificity on the reintegration of patients who are Vermont residents into the Substance Use Disorder (SUD) system of care in Vermont and the reintegration of patients who are not Vermont residents. Explain in detail how Silver Pines will ensure that clients will continue treatment in the larger system of care following discharge from Silver Pines' withdrawal management program.

Silver Pines employees will be trained in the Vermont System of Care as part of their onboarding process. This will include making live connections to the providers in this network. The individuals that reside in Vermont will be connected and referred to providers in the SUD systems of care network, including but not limited to Specialty Programming (Residential, Hubs), Intensive Outpatient Treatment (IOP), Outpatient Treatment (including the Spoke system) and the Vermont Recovery Network (Turning Point Centers, Recovery Coaching). The Silver Pines staff will have contact with each level of this system, including collaborating with the preferred provider network in the State. The Aftercare Specialist will create the continued care plan by scheduling dates and times upon discharge that the individual will receive services in the continuum of care.

Similar to the state of Vermont, Silver Pines Aftercare Specialists will develop relationships with the providers in the states and provinces from which the individuals are presenting. It is understood that there is great variability in SUD systems of care in different geographic areas, however, Silver Pines will fully support individuals in accessing any resources that are available, including mutual support groups such as Alcoholics Anonymous (AA), Narcotics Anonymous (NA), and Smart Recovery. Consistent with the standard of care in addiction treatment, engagement in ongoing recommended care will be completely voluntary. Silver Pines can offer access to resources, schedule appointments, provide information about the benefits of the continued treatment, and readily support individuals for up to a year after discharge.

15. What is the expected average length of stay overall and for each substance to be treated for individuals seeking treatment at Silver Pines? Specify how each length of stay was determined for each substance.

Lengths of stay will be individualized, however a duration of 7-10 days is planned in general to allow time to complete management of acute withdrawal where present, initiate pharmacotherapy in cases of opioid and alcohol use disorder, engage individuals in effective psychosocial therapies, build motivation for ongoing treatment, and make arrangements for continuing care in each patient's home area. This time will also be used to assess for co-occurring psychiatric disorders, initiate treatment where indicated, and monitor initial response and tolerability.

The planned duration will not require modification for each substance, as it is sufficient to complete acute management of withdrawal for most substances and, in the case of benzodiazepines, to allow initial stabilization and planning of a longer-term taper and

appropriate follow-up (discussed in greater detail previously in #9).[38] Because SUDs are recognized to be chronic conditions, in all cases, emphasis will be placed on building motivation for and facilitating engagement with ongoing treatment after discharge.

16. Explain in detail the tapering plan for each population/substance and the efficacy of such plans relative to the incidence of relapse and/or adverse health events.

Tapering plans will be used in cases of physiologic dependence on alcohol and benzodiazepines, and as an option for opioids, to relieve symptoms and prevent medical complications. For alcohol, withdrawal management will be based on symptom-triggered treatment rather than a fixed taper schedule, as substantial evidence supports this approach as providing similar clinical outcomes with shorter durations and lower medication requirements than fixed-duration tapers.[39] The protocol that will be used at Silver Pines is outlined in #10. Due to the symptom-triggered nature of the process, there is not a pre-specified duration, but total durations of medication administration is typically two days or less for alcohol withdrawal.[40] As previously noted, best practices for management of benzodiazepine withdrawal are less well researched, but guidelines call for a more gradual process such as decreasing doses by 20% per week.[41] In cases of benzodiazepine withdrawal, Silver Pines will initiate the taper process and arrange for ongoing tapering in an inpatient or outpatient setting in the individual's local area as clinically appropriate.

In cases of opioid withdrawal, our management strategy will depend on plans for ongoing treatment. As discussed previously, the preferred approach will be to initiate ongoing pharmacotherapy with either buprenorphine/naloxone or naltrexone for individuals with opioid use disorder. In the case of buprenorphine, no tapering process is required; individuals abstain from opioids for approximately 12 hours, to allow early symptoms of opioid withdrawal to develop, and titration of buprenorphine/naloxone can then begin to provide rapid relief of symptoms and achieve a full therapeutic dose within 1-2 days.[42]

For individuals planning to begin treatment with naltrexone, the preferred approach will be management of opioid withdrawal using non-opioid medications rather than an opioid taper in order to facilitate initiation of naltrexone at the earliest opportunity, since current guidelines call for a full 7 days without opioids prior to administration of the first dose of naltrexone;[43] the protocol for symptomatic treatment with non-opioid medications is outlined under item 10. For

[38] Center for Substance Abuse Treatment. Detoxification and Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series, No. 45. HHS Publication No. (SMA) 15-4131. Rockville, MD: Center for Substance Abuse Treatment, 2006.
[39] Holleck et al. 2019. Symptom-triggered therapy for alcohol withdrawal: a systematic review and meta-analysis of randomized controlled trials. J General Internal Medicine 34:1018-1024.
[40] Ibid.
[41] Department of Veterans Affairs. 2015, *VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders, version 3.0*.
[42] Substance Abuse and Mental Health Services Agency (SAMHSA). 2018. *Medications for Opioid Use Disorder: TIP Series 63*. HHS Publication No. (SMA) 18-5063.
[43] Ibid.

individuals with physiologic dependence on opioids who decline both buprenorphine/naloxone and naltrexone, a 7-day buprenorphine taper will be offered, based on evidence of similar clinical outcomes with taper durations ranging from one to four weeks.[44] Initiation of maintenance pharmacotherapy, however, will be preferred and strongly encouraged, and staff will discuss with individuals any concerns and obstacles to such treatment and work to resolve them to the extent possible.

17. The application states on page 27 that individuals will have access to a Registered Dietician. However, the staff list does not list this position and it is not clear that it will be a contracted service. Please explain. Also clarify whether the cost for this position or service is reflected in the total annual operating expenses and financial tables submitted.

Silver Pines will contract with a Registered Dietitian (RD), and each individual will receive an initial one-hour session at the onset of treatment. The cost of the initial assessment is included in the overall cost of treatment and reflected in the updated financial table (Appendix II). If an individual would like further sessions, it will be at an additional cost.

18. The application states on page 38: "We will also provide access to qualified mental health professionals." Please explain in more detail, including whether such professionals will be located on or off site, and whether the cost to access these professionals is included or excluded in the residential cost of care.

Silver Pines will employ Licensed Clinical Mental Health Clinicians (LCMHCs) and Licensed Independent Clinical Social Workers (LICSWs) in addition to a Board Certified psychiatrist, and as such, these professionals and the treatment they provide will be embedded in the overall cost of the program.

The LCMHCs and LICSWs will serve as clinicians who are dually licensed drug and alcohol counselors (LADCs) and will offer individual and group therapy. The psychiatrist will provide a full psychiatric evaluation as indicated as well as medication management. If Silver Pines believes that the mental health needs of an individual exceed our level of care, we will work with Emergency Medical Services (EMS), the local crisis screening agency, and/or make a direct referral to the appropriate level of care.

[44] Dunn KE, Sigmon SC, Strain EC, Heil SH, Higgins ST. 2011. The association between outpatient buprenorphine detoxification duration and clinical treatment outcomes: a review. *Drug Alcohol Depend* 119:1-9.

19. The application states on page 39 that individuals will have an appointment with PCPs upon discharge. Please explain in detail how this will work for in-state and out-of-state residents who seek treatment at Silver Pines.

For those who already have established primary care providers (PCPs), Silver Pines Aftercare Specialists will request that individuals sign releases of information and assist the individual in contacting their PCPs and scheduling a follow-up appointment post discharge.

For those individuals who do not have an established PCP, the Aftercare Specialists will identify local PCPs with availability, discuss the options with the individuals and coordinate the scheduling of a new patient visit upon discharge.

20. The application states on page 24 that Silver Pines will provide data to the Department of Mental Health (DMH). Please identify and explain in detail the data that will be provided to DMH and how frequently and over what period of time such data will be provided.

Silver Pines will obtain the following data on individuals admitted to the program:

- Demographics – race, ethnicity, gender orientation, marital status, employment status, years of education, housing, referral source, and type of insurance
- Substances used, date of first use, administration method(s), frequency, date of last use
- Number and percent of people who complete program
- Number and percent of people who are on medication-assisted treatment

These data sets will be obtained over our secure proprietary web-based platform and via telephone interviews and surveys. The aggregated data from the past year can then be shared with the Green Mountain Care Board and other state partners on an annual basis.

Community/System of Care Integration

21. Provide with specificity how Silver Pines will integrate into: (a) the Vermont SUD system of care and (b) the SUD systems of care in other states for non-residents. Explain Silver Pines' connections to the Vermont Preferred Provider Network and such networks in other states.

a. Silver Pines will ensure all of its employees are trained on and knowledgeable about the Vermont SUD system of care as part of their on-boarding process; this will include making live connections to the providers in this network. The individuals that reside in Vermont will be connected and referred to providers in the SUD systems of care network, including but not limited to Specialty Programming (Residential, Hubs), Partial Hospitalization Programs (PHPs), Intensive Outpatient Programs (IOPs), Outpatient Treatment (including the Spoke system), and the Vermont Recovery Network (Turning Point Centers, Recovery Coaching).

The employees will have contact with each level of this system, including collaborating with the Vermont Preferred Provider Network. In collaboration with the individual and treatment team, the Aftercare Specialist will create a continued care plan by scheduling dates and times upon discharge that the individual will receive services in the continuum of care.

b. Silver Pines Aftercare Specialists will develop a similar relationship with the providers and resources in other states. It is understood that there is great variability in SUD systems of care in different geographic areas, however, Silver Pines will fully support individuals in accessing whatever resources are available, including AA, NA, and Smart Recovery. As true with any treatment, engagement in ongoing care is completely voluntary. Silver Pines can offer access to resources, schedule appointments, discuss the benefits of continued care, provide the clinical rationale for recommendations, and provide ongoing support via telephone and videoconferencing if desired for up to a year after discharge. For individuals without established medical care, resources including SAMHSA's Buprenorphine Practitioner Locator[45] and insurance carriers' provider directories will be used to help connect patients with providers in their home areas.

Silver Pines will integrate into the Vermont SUD system of care and the Vermont Preferred Provider Network in a number of ways:

- Accepting referrals from and making referrals to inpatient, outpatient and community providers.
- Establishing a collegiate relationship with other Vermont SUD providers for improved coordination of care and knowledge sharing of effective treatment protocols.
- Participating in statewide coalition meetings, such as the Intervention, Treatment and Recovery Meetings to continue to be engaged in the SUD system of care as a whole in Vermont.

22. Do you expect out-of-state residents seeking care at Silver Pines to require services from Vermont's community/system of care following discharge? If so, quantify how this will impact Vermont's community system of care.

We anticipate that the large majority of individuals from out of state will *not* require Vermont community services/system of care following discharge.

[45] https://www.samhsa.gov/medication-assisted-treatment/practitioner-program-data/treatment-practitioner-locator.

23. Provide a detailed description of the processes proposed for outreach for patients' post-discharge. Explain in detail what the outreach entails, the timelines of the outreach and how the outreach interacts with and/or replaces on-going treatment post-discharge from Silver Pines. Identify whether any of the owners/investors of Silver Pines Partners, LLC have an interest in each of the proprietary technologies and processes to be employed.

A milestone study has shown that the highest rate of relapse for multiple substances is in the first 3 months after initial treatment.[46] Thus, Silver Pines plans to keep in regular contact with individuals and monitor their stability particularly during this time.

Silver Pines will outreach to individuals by contacting them via phone within twenty-four hours post discharge, followed by weekly calls for the first three months post discharge and monthly thereafter for up to a year. In addition to the phone outreach, Silver Pines will offer tele-counseling within one week post-discharge and as clinically appropriate thereafter. With permission and signed release of information, Silver Pines' staff will also follow-up with an individual's family, friends, sober supports, and outpatient treatment providers via phone and email. To provide added accountability, we will identify locally accessible sites that the individual can present to for alcohol and drug screenings at scheduled intervals or as clinically appropriate.

	Within 24 hours post-discharge	1 week post-discharge	3 months post-discharge	1 year post-discharge
Telephone calls	X	X	X	X
Tele-counseling		X	as indicated	as indicated
Urine drug tests		as indicated	as indicated	as indicated
Family/Provider Follow-Up	X	X	as indicated	as indicated

This outreach will not replace any ongoing treatment the individual is receiving post discharge but will complement it and serve as an additional source of support, motivation, and accountability.

The discharge process is an integral part of our clinical model and all the associated technologies are the intellectual property of Silver Pines, LLC.

[46] Hunt WA et al. 1971. Relapse rates in addiction programs. Journal of Clinical Psychology 27:455-456.

24. Provide detailed information on the computing platform referenced on page 34 of the application and how Silver Pines will systematically collect, analyze and track all outcome measures noted on page 29 and specify the period of time such data will be collected and tracked for each individual who has sought treatment at Silver Pines. Specifically address how each of these data will be used to inform and continuously improve programming and protocols.

The platform we will use for data collection and analysis software is one among a set of three possibilities: 1) Qualtrics (www.qualtrics.com); 2) IBM's SPSS; or 3) SAS's JMP. All three analytical software packages are well-established and tested software platforms with very user-friendly interfaces. These data analysis platforms are being used extensively by Fortune 500 companies, large health care organizations, and universities. Dr. Cats-Baril has used all of the packages with success in previous medical outcome projects. The final decision on what package will be implemented at Silver pines will made late in Spring 2020 in consultation with the Data Analyst we will be hiring.

The data that we collect will allow us to correlate outcomes (completion and follow-up rates), with the activities (length of stay, types of therapies, timing of therapies, intensity, frequency, adjunct activities) and processes. These correlations will allow us to start identifying potential association between specific (best) practices and successful outcomes.
We will use an organizational learning approach to debrief staff and expand successful practices and codify knowledge. Our continuous improvement and organizational learning program is based on rigorous measurement and data analysis to quantify and evaluate the impact of our clinical efforts. Our continuous improvement is based on the following steps:

1. Definition of clinical success using measurable and tangible outcomes, both short- (daily and weekly data collection) and medium-term (1 month to 1 year).
2. Develop metrics and scales to measure each of the outcomes that define success in a systematic and unbiased fashion.
3. Collect data on outcomes using those metrics and scales.
4. On a quarterly basis, perform statistical analysis to identify correlations and determine causality. Correlate specific outcomes measures (i.e., measures of success) to the following factors among others: a) demographics; b) co-morbidities and diagnosis; c) type of addiction; d) therapy components provided; and, e) providers that delivered care.
5. Identify statistically significant differences in outcome measures within stratified patient populations.
6. Meet with staff and find root causes and explanation for such differences by using the "5W-H" ("Who; What; When; Where; Why and How") approach among other techniques.
7. Identify specific practices and practitioners that led to those differences (both positive and negative differences).
8. When a treatment modality/practice led to superior outcomes, codify knowledge, specify best practices, train, and disseminate across organization.
9. When a treatment modality/practice led to inferior outcomes, intervene, change, train and disseminate across the organization.
10. Continue measuring to assess effect of change in practices and training.

25. Explain in detail the contact you have had with Copley Hospital and local EMS services to date and the nature of the relationships you intend to establish with these entities. Explain the annual projected volume that could be generated for both services, how that volume was calculated, and whether each entity has determined they have sufficient capacity to provide such services.

We have reached out to Mr. Scott Brinkman, Chief at Stowe Emergency Medical Services (EMS), and Dr. Donald Dupuis, MD Chief Medical Officer at Copley Hospital. We plan on developing collaborations and contingency contracts with both organizations.

We anticipate a very low percentage of Silver Pines' admissions (approximately 2.5%) will require local EMS and hospital services. This percent is based upon conversations with other residential facilities in the State. Thus, we anticipate the approximate number of people receiving treatment at Silver Pines who will need local hospital or EMS services is: 9 in Year 1, 17 in Year 2, and23 people in Year 3 and beyond.

26. Provide more detailed information on the anticipated referral sources and referral process for Vermont residents and non-Vermont residents to access services at Silver Pines.

Referral Process:
Anticipated referral sources will include self-referrals, referrals from loved ones, hospitals, PCPs, and/or any external providers that are seeking MSW and/or residential treatment for individuals. The individual, loved one, or provider begins the referral process by calling the designated intake line or inquiring through our website. Once the intake is initiated, the individual completes a phone screening and is connected to a clinical team member to begin the intake process.

Referral Sources:
In an effort to grow referral sources, Silver Pines will exhibit at conferences in and out of the State of Vermont, schedule face-to-face meetings with potential referents, and welcome people to visit the facility. Additionally, Silver Pines will join local coalition meetings and groups in order to inform others about our treatment program and develop relationships with them.

27. Explain in detail how and with whom Silver Pines will collaborate with and financially contribute (specify the dollar-amount range of contributions) to local addiction community resources and supports. Clarify whether this expense is reflected in the annual operating expenses and financial tables submitted.

Silver Pines will earmark 1% of its net revenues to financially support local community-based organizations. In its first year of operation, Silver Pines will form an independent board of seven individuals, who are recognized leaders in the prevention and treatment of addiction in Lamoille County and the State of Vermont. The Board will call for proposals once a year, review the

proposals, and decide how to allocate the funds. If, on a given year, the funds are not completely spent, they will roll over into the next year.

Based on our financial projections, Silver Pines contributions to the "1% for Recovery" fund will range between $40,000 and up to $100,000 in its first three years of operation. This "1% for Recovery" program has been reflected in the annual operating expenses and financial tables we have submitted with this set of responses to the Green Mountain Care Board's questions in Appendix II.

Financial

28. Submit a balance sheet with proposed years 1, 2 and 3 in a standard spreadsheet format.

As previously stated, we have produced an intimal balance sheet ("Year 0") using the provided template for our initial balance sheet. Our initial balance sheet is based on $1,000,000 in partner's equity cash contribution that will translate into $905,925 of working capital and $94,075 in equipment. In lieu of a balance sheet for Years 1, 2 and 3, we have included a very detailed full pro-forma forecast for the first three years of operation (see Appendix II).

As indicated in the pro-forma presentation, we expect to be cash-flow positive within 6 months of operations and end up Year 1, 2 and 3 with profit (before taxes) of $461,079; $3,513,840; and, $6,464,584 respectively.

29. Gross revenue is included, but deductions from revenue and net revenue are not. Include a breakdown of deductions from revenue at the annual level.

As individuals receiving care at Silver Pines will pay upfront – prior to receiving any services, we will not have any unfulfilled or "bad" debt, and therefore, we do not have any deductions to make.

30. Provide a breakdown at an annual level of revenue (gross, deductions, and net) by payer.

The following table is an updated breakdown of the annual revenue by payer. We have also included updated revenue source projections (Tables 6A, 6B, 6C) in Appendix III from the original certificate of need (CON) application to reflect the changes in projected rates of self-pay and commercial, which we based on newly found evidence from SAMHSA.

SILVER PINES
Revenues

ASSUMPTIONS: **$10,500 per week (benchmark Brattleboro Retreat).**
Staffing levels adjust to census.
Silver Pines Revenue will be self-pay (57%) and commercial (43%), proportions estimated based on the numbers of admissions to substance use treatment programs paid for nationally by private insurance (45,643) and self-pay (60,557) in 2017.[47]
Census Year 1: 19% to 44% capacity; i.e., 6 to 14 patients.
Census Year 2: 44% to 69% capacity; i.e., 14 to 22 patients.
Census Year 3 and beyond: 69 to 88% capacity; 22 to 28 patients.
2 months of start-up/fill-up.

Revenue			**YEAR 1**	**YEAR 2**	**YEAR 3**
	Average Daily Census (maximum 32)	1	14	22	28
	Average Daily Census % Capacity	x/32	44%	69%	88%
Payer	Monthly Total Patient Days		434	682	868
Medicare			$0	$0	$0
Medicaid			$0	$0	$0
Commercial		43%	$2,471,640	$4,472,430	$6,237,150
Self Pay		57%	$3,276,360	$5,928,570	$8,267,850
Free Care/Unpaid			$0	$0	$0
Other			$0	$0	$0
	Revenue Per Day per Patient	**$1,500**	**$1,500**	**$1,500**	**$1,500**
	Gross Revenue		**$5,748,000**	**$10,401,000**	**$14,505,000**
	Deductions		**$0**	**$0**	**$0**
	TOTAL REVENUE		**$5,748,000**	**$10,401,000**	**$14,505,000**

Other

31. The application states on page 12: "Currently in Vermont, there is only one ASAM 3.7-level facility located in the southern part of the state, and individuals in need of such services outside of that area are using Emergency Departments (EDs) and inpatient hospitalization at a significant cost." Provide the data source(s) and information that supports this assertion.

Currently in Vermont, there are three facilities that provide withdrawal management and/or residential SUDs services: a) Valley Vista, which is an ASAM-level 3.5 facility, b) Serenity House, an ASAM-level 3.5 facility, and c) Brattleboro Retreat, an ASAM-level 3.7 facility.

[47] Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. *Treatment Episodes Data Set (TEDS): 2017*. SAMHSA: Rockville, MD.

Specific quantitative information on the number of Vermonters who would benefit from MSW at an ASAM-level 3.7 facility and are using Emergency Departments (EDs) and hospitals instead is not publicly available.

Our assertion was based on a combination of publicly accessible local and national data. According to the 2017 Vermont Hospitals Report, the yearly totals for inpatient hospital admissions in Vermont where the primary diagnosis was alcohol- and substance-related were 751 in 2014, 837 in 2015, 818 in 2016, and 867 in 2017.[48] The unmet need for treatment of SUDs has been shown to be associated with higher rates of repeat ED utilization and hospital admission after presenting to the ED.[49] Similarly, a 2018 study showed that the number of accessible addiction treatment programs in a person's local area predicted a lower likelihood of repeat emergency department presentations.[50]

32. The application states on page 30: "Silver Pines anticipates reducing the overall healthcare costs in Vermont and across the nation by serving people who are currently using ambulatory and emergency services often followed by inpatient hospital admission." Provide the data source(s) and information that supports this assertion.

Economic studies have shown that comprehensive addiction treatment leads to significant potential cost savings. A 2016 study in Vermont and a retrospective claims database analysis have both demonstrated decreased total medical costs for individuals with opioid use disorder engaged in ongoing pharmacotherapy.[51] [52] Additionally, a 2017 study found that inpatient addiction consultation for hospitalized patients increases post-discharge abstinence and reduces addiction severity.[53] This study also found that starting medication-assisted treatment for alcohol use disorder during inpatient treatment led to a statistically significant decrease in inpatient substance-related hospitalizations and significantly greater reduction in substance-related ED visits. Thus, we anticipate that Silver Pine's comprehensive treatment approach will contribute to decreased downstream health costs.

[48] Vermont Green Mountain Care Board. (2019). *2017 Vermont Hospitals Report*. Burlington, VT: Vermont Department of Health, Division of Health Surveillance.
[49] Rockett IR, Putnam SL, Jia H, Chang CF, Smith GS. Unmet substance abuse treatment need, health services utilization, and cost: a population-based emergency department study. Ann Emerg Med. 2005; 45(2):118–127. [PubMed: 15671966].
[50] Andrews CM et al. 2018. Availability of outpatient addiction treatment and use of emergency department services among Medicaid enrollees. Psychiatric Services 69:729-732.
[51] Mohlman MK et al. 2016. Impact of medication-assisted treatment for opioid addiction on Medicaid expenditures and health services utilization rates in Vermont. Journal of Substance Abuse Treatment 67:9-14.
[52] Baser O et al. 2011. Cost and utilization outcomes of opioid-dependence treatments. American J Managed Care 17s8:s235-s248.
[53] Wakeman, SE et al. 2017. Inpatient Addiction Consultation for Hospitalized Patients Increases Post-Discharge Abstinence and Reduces Addiction Severity. J Gen Int Med 32:909-916.

33. The application states on page 29: "To provide and ensure the highest standards of care at Silver Pines, we will systematically track outcomes measures, such as treatment initiation, treatment retention, successful completion of program, rates of abstinence and substance use reduction, aftercare follow-up, client satisfaction, and a reduction in ED visits and hospital admissions." Explain the duration of collection and analysis and specify how Silver Pines will collect data in each of these areas.

Silver Pines will systematically collect outcomes data on all of our patients for one year post-discharge. Staff will be trained to collect this data through direct contact with for patients via phone, email, survey, and video as well as contact with family members, social supports, labs, and service providers for which the individual has signed releases of information. The duration of collection will be one year.

As mentioned in our response to Question #24 above, we will be analyzing outcomes data with a statistical analysis package. We are considering three possibilities: Qualtrics (www.qualtrics.com). IBM's SPSS (www.ibm.com/products/spss-statistics), or SAS's JMP (www.jmp.com). We have experience with all three packages through past medical outcomes-based projects. Our final decision on what analytical package to use will be finalized in late Spring 2020.

34. Explain the contact you have had with the Vermont Division of Licensing and Protection for the licensure of the 32 beds at Silver Pines.

Silver Pines had a preliminary conversation with Ms. Pamela Cota, Licensing Chief at the Vermont Division of Licensing and Protection, in October 2019. She instructed Dr. Cats-Baril to keep her informed as we move through the CON process and let her know when the facility is built, so she and her team can come and inspect it. Ms. Cota is currently on leave, and we have contacted a colleague, Ms. Sarah Sherbrook, in her absence to provide an update on the status of our CON application.

35. Provide copies of Exhibit A and B that are referenced on page 1 of the Lease.

Exhibit A showing the latest floor plans for the facility has been included in this document as Appendix IV.

Exhibit B, the facility furnishings, are still to be determined. Silver Pines expects to have a complete list of furnishings by the end of February 2020.

36. Identify and describe the electronic health record (EHR) system you plan to use at Silver Pines and cost associated with the system and whether the cost for the EHR system is included in the annual operating expenses and financial tables submitted.

Silver Pines is in the process of selecting an appropriate electronic health record (EHR) system. We have researched vendors and narrowed them down to a short list. Once we obtain a Certificate of Need from the Green Mountain Care Board, we will finalize selection of the EHR. The costs are already included in the annual operating expenses and financial tables submitted in the CON application.

Reimbursement

37. Explain whether all services provided to individuals admitted to Silver Pines will be included in the residential rates to be charged. In a table format, list all services that will be billed and included in the residential rate and to whom they will be billed and a list of all services that will be billed outside the residential rate and to whom they will be billed, including transportation and all other services.

At Silver Pines, our fees include everything necessary to successfully complete the program, with the exception of 1) prescription costs/co-pays and 2) additional wellness services as outlined below. We will work with insurance carriers and bill them directly for services. Additionally, we will accept individuals who wish to self-pay. Full payment is due upon admission.

Services		Included in the Residential Rate	Optional for Additional Cost	Notes
Comprehensive Medical & Psychiatric Assessment		X		
Diagnosis		X		
Medication Management		X		
Vitals		X		
Acute Needs		X		
Withdrawal Assessment/BAC		X		
Labs, Blood Work, Urine Analysis, STD Panel, HIV/AIDS, Hepatitis B and C, Liver Function		X		Private insurance providers will be billed separately for labs.
Diagnostic Evaluation		X		
Individual Therapy		X		
Group Therapy		X		
Art Therapist		X		
Family/Couples Therapy		X		
Mindfulness		X		
Case Management		X		
Continuing Care Planning		X		
Psychometric Testing		X		

Services		Included in the Residential Rate	Optional for Additional Cost	Notes
Crisis Management		X		
Milieu Management		X		
Screening and Brief Intervention		X		
Intake		X		
Orientation		X		
Treatment Planning		X		
Psychoeducation		X		
Documentation		X		
Care Coordination		X		
Post-Discharge Follow-up and Support		X		
Food Service		X		
Laundry		X		
Transportation		X		
Housekeeping		X		
Acupuncture		X	X	Adjunct treatment of choice: One complementary session is included in the treatment cost. Additional sessions will be available for purchase based on personal preferences.
Message		X	X	Adjunct treatment of choice: One complementary session is included in the treatment cost. Additional sessions will be available for purchase based on personal preferences.
Tai Chi/Qigong		X	X	Adjunct treatment of choice: One complementary session is included in the treatment cost. Additional sessions will be available for purchase based on personal preferences.
Yoga		X		
Exercise		X		
Nordic Activities		X		
Life Coaching		X	X	Adjunct treatment of choice: One complementary session is included in the treatment cost. Additional sessions will be available for purchase based on personal preferences.
Registered Dietician		X	X	Adjunct treatment of choice: One complementary session is included in the treatment cost. Additional sessions will be available for purchase based on personal preferences.
Data Analysis		X		
Outcomes Assessment		X		
Neural Network Modeling		X		

Appendix I – Articles from Peer-Reviewed Journals

Peer-reviewed articles on neural network-based algorithms and machine-learning principles.

1. Desjardins I., Cats-Baril W., Maruti S., Freeman K., and Althoff R.: Suicide risk assessment in hospitals: an expert system-based triage tool. J Clin Psychiatry 2016; 77: pp. e874-e882.
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Appendix II – Updated Financial Tables 3-Year Pro Forma

SILVER PINES
3 Year Pro Forma P&L

				Total Pre CO	Total Year One	Total Year Two	Total Year Three
Revenue							
Average Daily Census (maximum 32)			1				
Average Daily Census % Capacity			x/32				
Monthly Total Patient Days							
Revenue Per Day per Patient			$1,500.00				
Gross Revenue							
Total Revenues				-	$5,748,000	$10,401,000	$14,505,000
Expenses							
Fixed		per month	annual				
	Rent	41,667	500,000	$83,333	$500,000	$525,000	$551,250
	Insurance: Property	833	10,000	$1,667	$10,000	$10,300	$10,609
	Insurance: GL & Professional	2,000	24,000	$4,000	$24,000	$24,720	$25,462
	Insurance: Medical Malpractice (1 Doctor)	1,000	12,000	$2,000	$12,000	$12,360	$12,731
	Insurance: E&O	417	5,000	$833	$5,000	$5,150	$5,305
	Real Estate Taxes	3,333	40,000	$6,667	$40,000	$41,200	$42,436
	Property Management	1,000	12,000	$2,000	$12,000	$12,360	$12,731
	Building Maintenance	1,000	12,000	$2,000	$12,000	$12,360	$12,731
	Company Vehicles (1)	1 1,667	20,004	$3,334	$20,004	$20,004	$20,004
	Vehicle Expense	833	10,000	$1,667	$10,000	$10,300	$10,609
	Marketing	7,500	90,000	$115,000	$90,000	$90,000	$90,000
	Equipment Maintenance	417	5,000	$833	$5,000	$10,150	$20,605
	Organized Activities	3,000	36,000	$0	$36,000	$37,080	$38,192

SILVER PINES
3 Year Pro Forma P&L

							Total Pre CO	Total Year One	Total Year Two	Total Year Three
	Laundry/Janitorial Services (see Room turnover)				2,000	24,000	$0	$24,000	$24,000	$24,000
	Utilities					-	$0	$0		$0
		Electric			3,000	36,000	$6,000	$36,000	$37,080	$38,192
		Gas			1,250	15,000	$2,500	$15,000	$15,450	$15,914
		Trash			500	6,000	$1,000	$6,000	$6,180	$6,365
	Software licenses				1,667	20,000	$1,667	$20,000	$20,000	$20,000
	Misc. Supplies				1,000	12,000	$1,000	$12,000	$12,000	$12,000
	Legal				1,250	15,000	$26,250	$15,000	$15,450	$15,914
	Accounting				3,333	40,000	$0	$40,000	$40,000	$40,000
	Accreditation and Certification				2,000	24,000	$0	$24,000	$24,000	$24,000
Total Fixed							$261,751	$968,004	$1,005,144	$1,049,048
Variable										
	# of Patients for Staffing Levels		**6**	**12**	**18**	**24**				
	Clinical Payroll									
		Medical Director	0.2	0.5	0.75	1	225,000	$7,500	$78,750	$154,688	$231,750
		Medical Provider (onsite)	0.75	0.75	0.75	0.75	247,520	$0	$185,640	$185,640	$191,209
		Medical Provider (on call)	1	1	1	1	145,600	$0	$145,600	$145,600	$149,968
		Nurse	4.2	4.2	8.4	8.4	105,000	$36,750	$441,000	$771,750	$908,460
		Mobile Registered Nurse	1	1	1	1	105,000	$0	$105,000	$105,000	$108,150
		Clinical Director	1	1	1	1	150,000	$25,000	$150,000	$150,000	$154,500
		Medical Assistant	1	1.5	2	3	58,240	$4,853	$72,800	$109,200	$179,962
		Counselor	1.5	2	3	4	84,000	$10,500	$147,000	$231,000	$346,080
		Aftercare Specialist	1	1	2	3	58,240	$4,853	$58,240	$101,920	$179,962
		Recovery Specialist	7	9	10	10	58,240	$33,973	$465,920	$567,840	$599,872

SILVER PINES
3 Year Pro Forma P&L

							Total Pre CO	Total Year One	Total Year Two	Total Year Three
Admin Payroll										
	Executive Director	1	1	1	1	150,000	$25,000	$150,000	$150,000	$154,500
	Receptionist	1	1	1	1	87,360	$7,280	$87,360	$87,360	$89,981
	Intake Coordinator	3.5	3.5	5	5	87,360	$25,480	$305,760	$404,040	$449,904
	Database Manager and Analyst	0.5	0.5	0.5	0.5	70,000	$5,833	$35,000	$35,000	$36,050
	Human Resources	0.5	0.5	0.5	0.5	60,000	$5,000	$30,000	$30,000	$30,900
Support Services										
	Chef	1	1	1	1	80,000	$13,333	$80,000	$80,000	$82,400
	Cooks	2	3	4	4	58,240	$19,413	$145,600	$218,400	$239,949
	Kitchen Staff	2	3	4	4	41,600	$6,933	$104,000	$156,000	$171,392
	Drivers	0.5	0.5	0.5	0.5	41,600	$1,733	$20,800	$20,800	$21,424
Total Payroll		30.65	35.95	47.4	50.65		$233,437	$2,808,470	$3,704,238	$4,326,412
Payroll Taxes					Annual Cost per emp		$23,344	$280,847	$370,424	$432,641
Health Care		24.52	28.76	37.92	40.52	18,000	$0	$479,520	$641,340	$729,360
Life and Disability						25,000	$0	$25,000	$31,250	$39,063
Insurance: Workers Comp						60,000	$0	$60,000	$75,000	$93,750
401k							$0	$0		
Ancillary Services	Massage 2xCensusx$85						$0	$46,531	$84,199	$117,421
Dietician	Diet Advice Session Census x $150							$122,357	$138,300	$117,421
Food	per census per day			50			$0	$191,600	$346,700	$483,500
Small wares	annual per # residents			32	50		$1,600	$0	$1,648	$1,697
Uniforms	annual per employee			47.4	50		$2,370	$0	$2,441	$2,514

SILVER PINES
3 Year Pro Forma P&L

							Total Pre CO	Total Year One	Total Year Two	Total Year Three
	Linens		annual per # residents	32	100		$3,200	$0	$3,296	$3,395
	Dues & Subscriptions				167	2,000	$0	$2,000	$2,060	$4,182
	Charitable Contributions				3,000	36,000	$0	$36,000	$37,080	$38,192
	Travel and entertainment				250	3,000	$0	$3,000	$3,090	$3,183
	Employee Appreciation				-	-	$0	$0	$0	$0
	Background checks				100	1,200	$1,200	$1,200	$0	$0
	Medication Costs		per census per day		50		$0	$191,600	$346,700	$483,500
	Medical Records				2,000		$2,000	$24,000	$24,720	$25,462
	Room turn over	census days/7			50		$0	$27,371	$49,529	$69,071
	Pest Control				58	700	$0	$700	$721	$743
	Phones				560	6,720	$0	$6,720	$6,922	$7,129
	Computer & IT Expense				12,000		$1,000	$12,000	$12,360	$12,731
Total Variable							$268,150	$4,318,917	$5,882,016	$6,991,368
Total Expenses							$529,901	$5,286,921	$6,887,160	$8,040,416
Profit/Loss							($529,901)	$461,079	$3,513,840	$6,464,584
1% for recovery								$4,611	$35,138	$64,646
NET PROFIT/LOSS								$456,468	$3,478,702	$6,399,938
Cumulative Cash Position										
Cumulative Equity Position	INITIAL PARTNERS'S EQUITY= $1MILLION							$1,456,468	$4,478,702	$7,399,938

SILVER PINES
3 Year Pro Forma P&L

		Total Pre CO	Total Year One	Total Year Two	Total Year Three
Electronic Health Record	$8,000				
BD Pyxis MedStation medication dispensing system	$50,000				
Electrocardiogram x 1	$2,850				
Vital monitoring equipment x 3	$2,850				
Defibrillators x 5	$6,375				
Statistical Analysis Package	$1,000				
Computers/software	$32,000				
	$103,075				

Appendix III – Updated Financial Tables 6A, 6B, and 6C

Financial Table 6A - Revenue Source Projections Without Project

Silver Pines

TABLE 6A

REVENUE SOURCE PROJECTIONS

WITHOUT PROJECT

Silver Pines will only exist through this project.

		Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Inpatient Revenue											
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Outpatient Revenue		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Other Revenue		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Silver Pines

TABLE 6A

REVENUE SOURCE PROJECTIONS

WITHOUT PROJECT

Silver Pines will only exist through this project.

		Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Patient Revenue		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Deductions from Revenue		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net Patient Revenue		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	DSP*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Latest actual numbers should tie to the hospital budget process. DOES NOT APPLY.

* Disproportionate share payments

Financial Table 6B - Revenue Source Projections Project Only

Silver Pines

TABLE 6B

REVENUE SOURCE PROJECTIONS

PROJECT ONLY

Silver Pines will be a residential/inpatient facility only.
Silver Pines Revenue will be self-pay (57%) and commercial (43%), proportions estimated based on the numbers of admissions to substance use treatment programs paid for nationally by private insurance (45,643) and self-pay (60,557) in 2017.[54]

	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Inpatient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
	N/A	N/A	N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%
Gross Outpatient Revenue										
Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[54] Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. *Treatment Episodes Data Set (TEDS): 2017*. SAMHSA: Rockville, MD.

Silver Pines

TABLE 6B

REVENUE SOURCE PROJECTIONS

PROJECT ONLY

Silver Pines will be a residential/inpatient facility only.
Silver Pines Revenue will be self-pay (57%) and commercial (43%), proportions estimated based on the numbers of admissions to substance use treatment programs paid for nationally by private insurance (45,643) and self-pay (60,557) in 2017.[54]

	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Other Revenue										
Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Patient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
	N/A	N/A	N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%

Silver Pines

TABLE 6B

REVENUE SOURCE PROJECTIONS

PROJECT ONLY

Silver Pines will be a residential/inpatient facility only.
Silver Pines Revenue will be self-pay (57%) and commercial (43%), proportions estimated based on the numbers of admissions to substance use treatment programs paid for nationally by private insurance (45,643) and self-pay (60,557) in 2017.[54]

	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Deductions from Revenue										
Medicare	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Medicaid	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Commercial	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Self Pay	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Free Care / Bad Debt	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	N/A	N/A	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Patient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
DSP*	N/A	N/A	N/A	N/A	**N/A**		**N/A**		**N/A**	
			N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%

Latest actual numbers should tie to the hospital budget process. DOES NOT APPLY.
* Disproportionate share payments

Financial Table 6C - Revenue Source Projections With Project

Silver Pines

TABLE 6C
REVENUE SOURCE PROJECTIONS
WITH PROJECT

Silver Pines will be a residential/inpatient facility only.
Silver Pines revenues will be Self-Pay (95%) and Commercial (5%)

	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Inpatient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
	N/A	N/A	N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%
Gross Outpatient Revenue										
Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Silver Pines

TABLE 6C
REVENUE SOURCE PROJECTIONS
WITH PROJECT

Silver Pines will be a residential/inpatient facility only.
Silver Pines revenues will be Self-Pay (95%) and Commercial (5%)

	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Gross Other Revenue										
Medicare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medicaid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commercial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self Pay	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Free Care / Bad Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Patient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
	N/A	N/A	N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%

Silver Pines

TABLE 6C
REVENUE SOURCE PROJECTIONS
WITH PROJECT

Silver Pines will be a residential/inpatient facility only.
Silver Pines revenues will be Self-Pay (95%) and Commercial (5%)

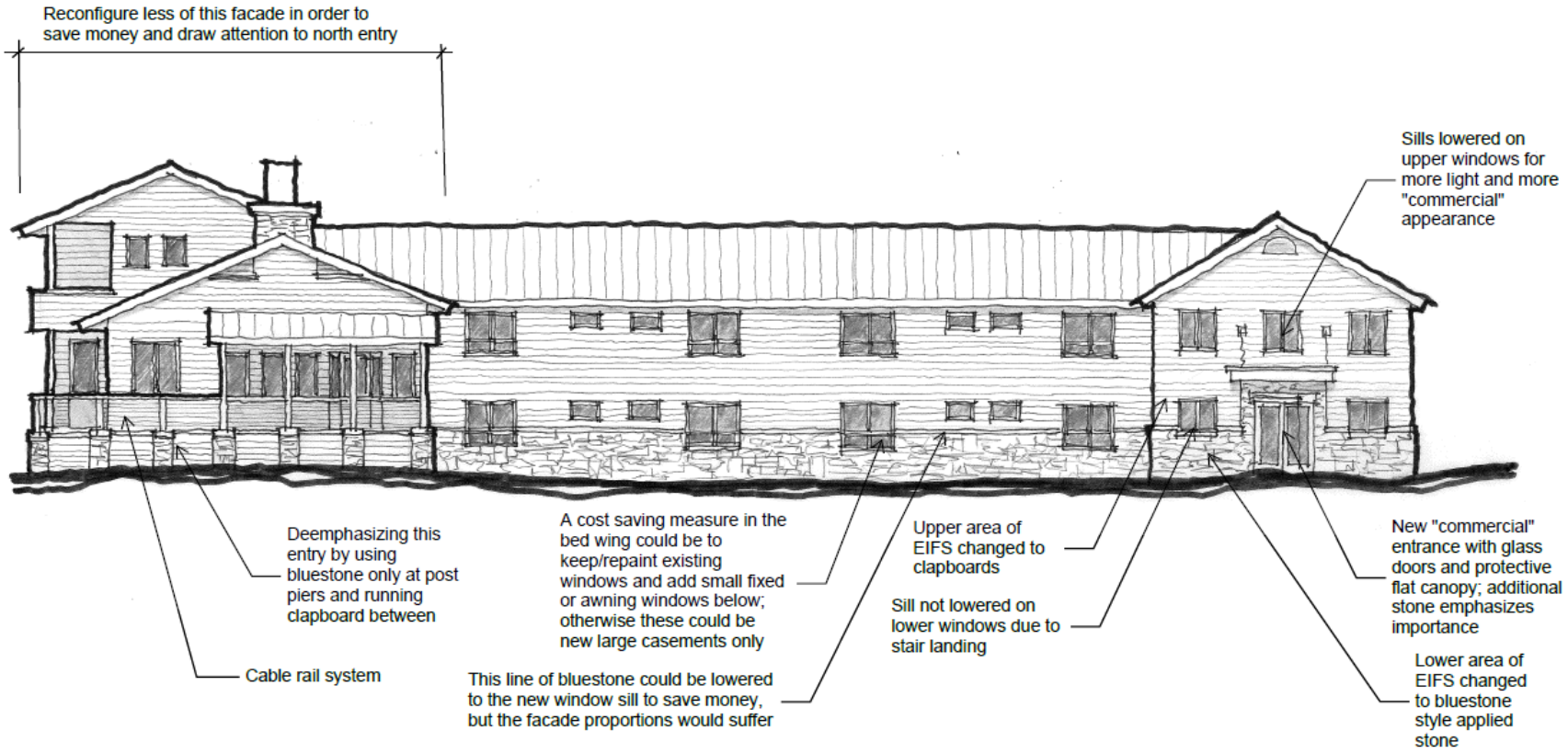
	Latest Actual #REF!	% of Total	Budget #REF!	% of Total	Proposed Year 1 #REF!	% of Total	Proposed Year 2 #REF!	% of Total	Proposed Year 3 #REF!	% of Total
Deductions from Revenue										
Medicare	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Medicaid	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Commercial	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Self Pay	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Free Care / Bad Debt	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Patient Revenue										
Medicare	N/A	N/A	N/A	N/A	$ -	0.0%	$ -	0.0%	$ -	0.0%
Medicaid	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Commercial	N/A	N/A	N/A	N/A	2,471,640	43.0%	4,472,430	43.0%	6,237,150	43.0%
Self Pay	N/A	N/A	N/A	N/A	3,276,360	57.0%	5,928,570	57.0%	8,267,850	57.0%
Free Care / Bad Debt	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
Other	N/A	N/A	N/A	N/A	-	0.0%	-	0.0%	-	0.0%
DSP*	N/A	N/A	N/A	N/A	N/A	0.0%	N/A	0.0%	N/A	0.0%
	N/A	N/A	N/A	N/A	$ 5,748,000	100.0%	$ 10,401,000	100.0%	$ 14,505,000	100.0%

Latest actual numbers should tie to the hospital budget process. **DOES NOT APPLY**

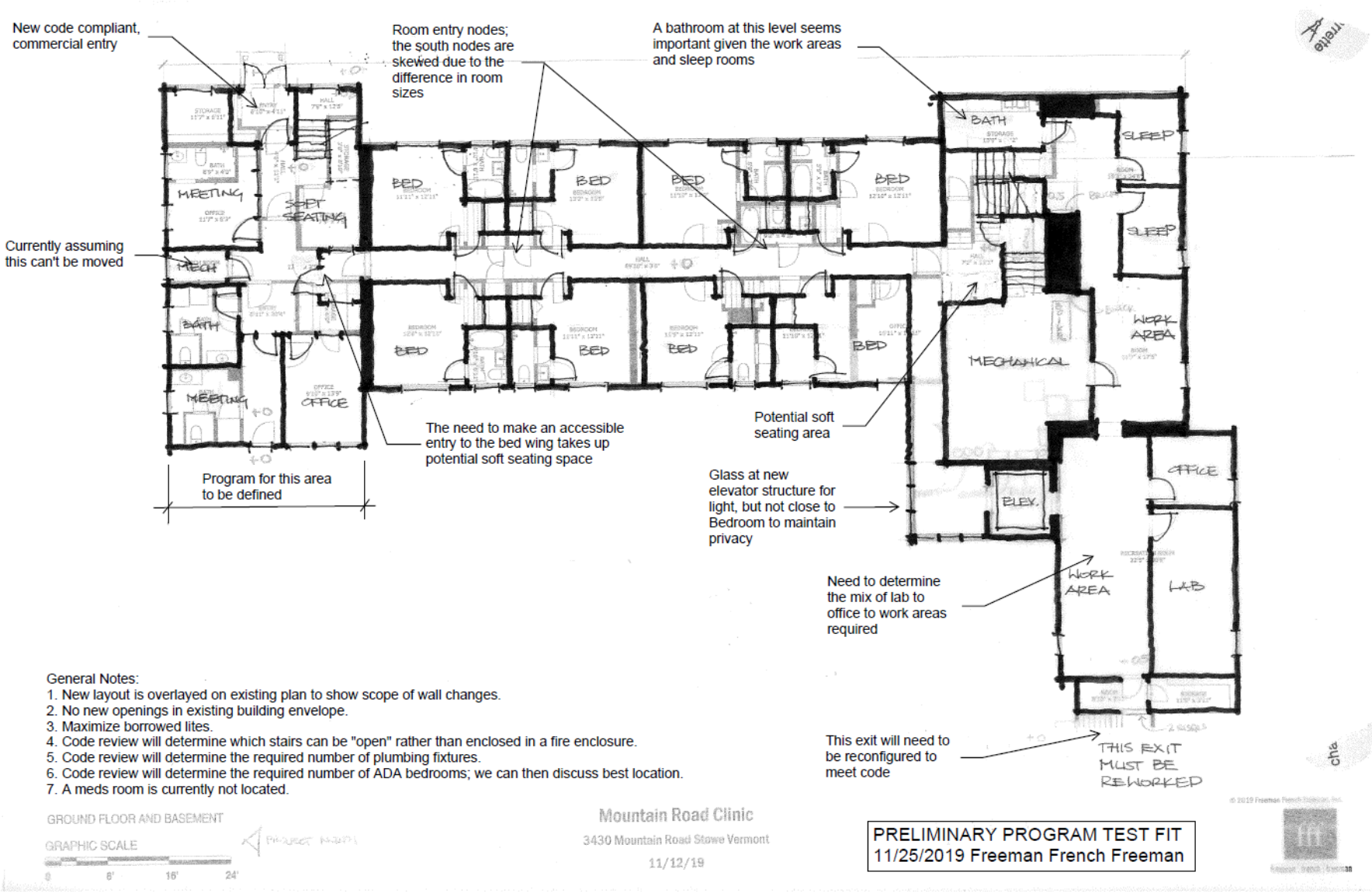
* Disproportionate share payments

Appendix IV – Exhibit A: Draft Floor Plans

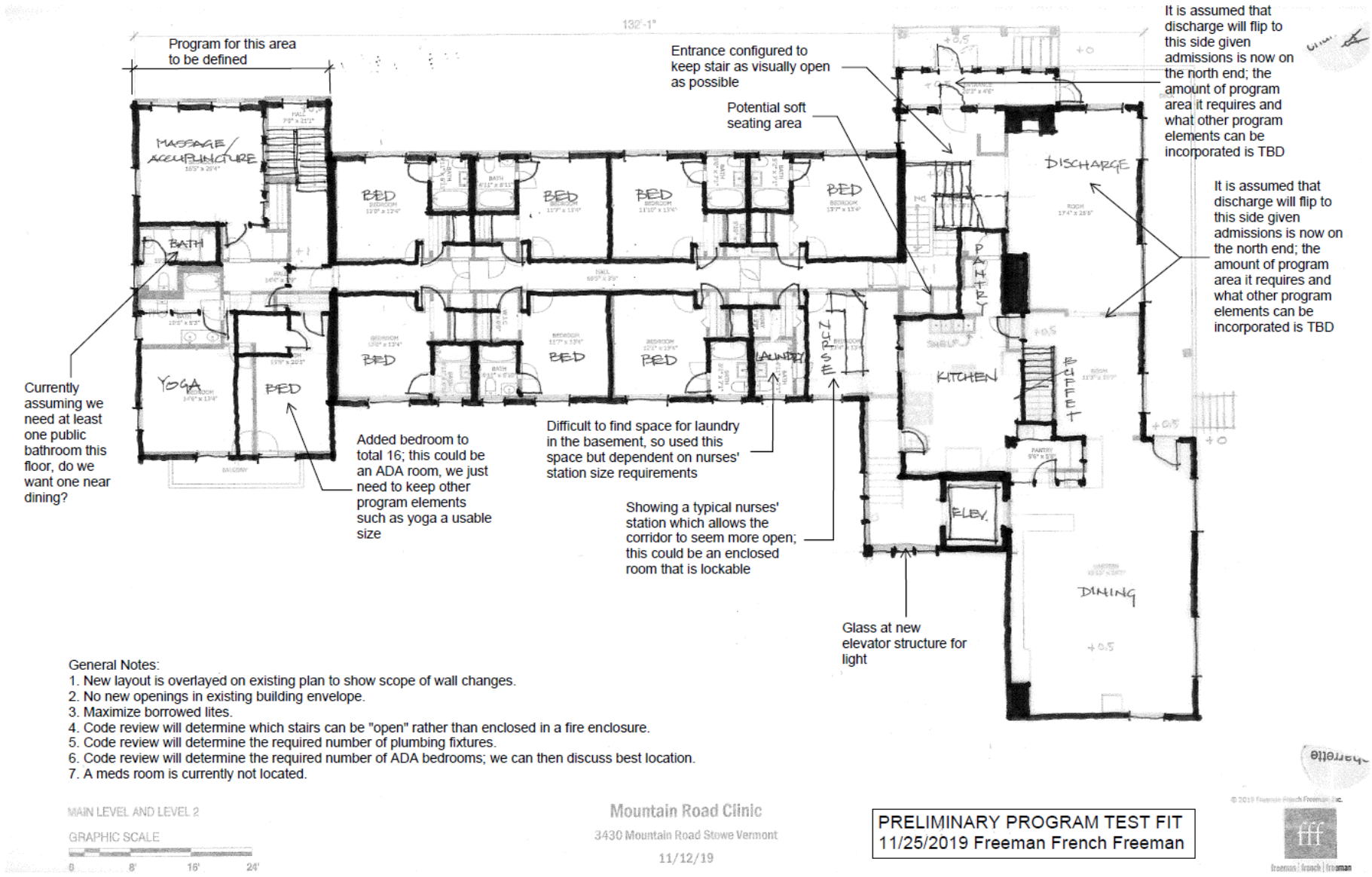
East Elevation



Main Basement and Split Ground



Main Level 1 and Spilt 2



General Notes:
1. New layout is overlayed on existing plan to show scope of wall changes.
2. No new openings in existing building envelope.
3. Maximize borrowed lites.
4. Code review will determine which stairs can be "open" rather than enclosed in a fire enclosure.
5. Code review will determine the required number of plumbing fixtures.
6. Code review will determine the required number of ADA bedrooms; we can then discuss best location.
7. A meds room is currently not located.

MAIN LEVEL AND LEVEL 2

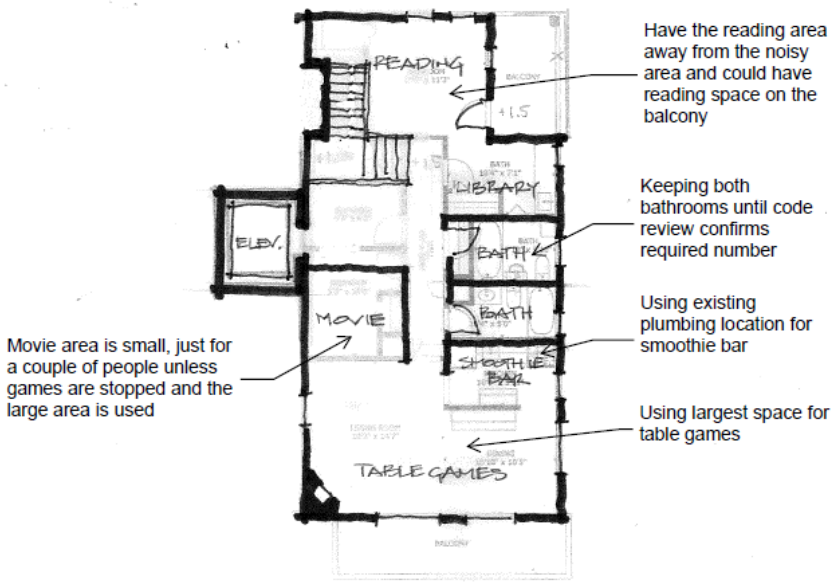
GRAPHIC SCALE

0 8' 16' 24'

Mountain Road Clinic
3430 Mountain Road Stowe Vermont
11/12/19

PRELIMINARY PROGRAM TEST FIT
11/25/2019 Freeman French Freeman

Main Level 3



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LEVEL 3

GRAPHIC SCALE

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freeman | french | freeman