# WOODSIDE JUVENILE REHABILITATION FACILITY

An overview of the existing facility, building and program shortcomings, and an introduction to the proposed 30 bed replacement facility.

February 2017

# Overview of Existing Facility

WOODSIDE

WOODSIDE JUVENILE REHABILITATION CENTER
ESSEX, VERMONT

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Duncan Wisniewski ARCHITECTURE

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## EXISTING BUILDING

### OVERVIEW

The existing facility was built as a 30 bed juvenile detention center in 1984. The gym, a pre-engineered steel building was added in 1997. There are two outdoor, fenced in recreational areas. Various modifications have been carried out over the years to address physical plant, functional and program requirements. Some bathroom work is scheduled in the near future to address maintenance and unsafe conditions.

BGS has provided excellent documentation of the building including the original construction drawings as well as the many projects that have been carried out over the years.

### STRUCTURAL

Jared Waite of Hardy Structural Engineering (HSE) assessed the existing building based on existing documentation and a site visit. They focused on the two criteria noted below relating to capacity and flexibility. The actual report is included in the appendices.

The building has a slab on grade main floor with a frost wall concrete foundation. Exterior walls are a CMU with outboard wood studs. The majority of the interior walls are CMU and most are structural. The second floor consists of elevated, structural slabs and the roof is wood framing.

- Is the structure sound and in compliance with present day structural codes?

HSE indicates that the main structure is sound, in good shape and meets all present day codes for loading capacity for this type of use. There are no apparent major repairs or upgrades needed at this time.

The gym, a pre-engineered steel building is also structurally sound.

- Does the structure lend itself to re-purposing, modifications and changing the spatial layout?

Given that the majority of the rooms are quite small - 7' x 10' - and they are all CMU and structural to support the elevated slabs above; this becomes a very difficult building to modify or change the layout. Any walls removed would need to be supported with steel beams. The rooms cannot even be reused in the present layout since the door openings are all too small to meet Life Safety and ADA requirements. The CMU opening would need to be increased and structural headers added.

The elevated slabs are very difficult to modify and represent a challenge for routing new building systems. As noted below the HVAC system is so enmeshed with the structure that it is difficult to remove or replace without structural modifications.

While the slab on grade and foundation are sound they are not easily modified to upgrade energy performance which is poor. and elevating the entire structure so that the floor is above the 500 year flood plain is virtually impossible.

### MECHANICAL & ELECTRICAL

Dan Dupras (mechanical engineer) and Claus Bartenstein (electrical engineer) of Engineering Services of Vermont reviewed existing documentation and visited the building to produce their report. The actual report is included in the appendices. There is a separate section addressing energy use, which is high and a separate one addressing issues identified BGS staff.

MECHANICAL - The building is heated with an oil fired, three boiler, ducted system. A chiller was added in 2006 to provide cooling. Domestic hot water is supplied through its own boiler. The double walled, UG oil storage tank was installed in 1997.

The gym is heated with a propane fired boiler and ducted system. There is no cooling or dehumidification. In the summer the structure and flooring can become so damp and slippery that it has caused several injuries.

The ESV report notes that several of the building systems are at the end of their life span and will need to be replaced. The ductwork and air handling is so enmeshed with the structure that it will be challenging to remove and replace them. Structural modifications may be necessary.

PLUMBING - These are all original systems except for various fixtures which have been replaced and many are at the end of their expected life span. The gym has no plumbing.

FIRE PROTECTION - Both main building and gym have separate wet sprinkler systems supplied from a 6" service and connected to the alarm system and appearing to be adequate and code complying.

ELECTRICAL - Original electrical service is rated at 120/208v, 3 phase, 4 wire, 600 amp which is sufficient capacity for this use, including an elevator. Depending on the scope of renovations, additions or new this would need to be reviewed for sufficient capacity.

Wiring and general power systems are all original and appear adequate and generally code compliant. In 2014 the generator was upsized from 30kw to 125kw to handle the entire structure through a transfer switch. It is likely that this could be reused with an expansion or new structure although the 125kw may no longer be sufficient for entire building load. Lighting is mostly fluorescent and generally efficient and energy code compliant although it could be improved.

Life Safety includes exit and egress lighting as well as an alarm system. Some aspects of these systems no longer meet code and the fire alarm is no longer supported with UL listed replacement parts. These systems need to be replaced.

Telecommunications are provided building wide through CAT5 cabling connected to an UG fiber optic service.

The Gym has its own sub-panel for power and fire alarm system. Various upgrades are required to integrate with main building and meet code.

# Overview of Existing Program Functions

## JUSTICE STANDARDS

The Council of Juvenile Correctional Administrators (CJCA) provides national leadership for improving juvenile correctional services, programs and practices. They have written a brief report summarizing why the existing building does not fit the WS program purpose or treatment model which is attached in the appendices.

The report notes that almost everything about the appearance and function of the building runs counter to and works against the treatment model that Woodside has implemented in moving from detention to rehabilitation.

The report notes areas where there is insufficient program space to serve the residents as well multiple deficiencies that create unsafe and non-therapeutic behavior for residents and expose other residents and staff to harm as well as spreading the behavior through trigger and contagion effects.

## BUILDING IMPACT ON PROGRAM AND FUNCTIONALITY

**GENERAL** - The information developed during the course of this process and the CJCA report referenced above continually reinforce that the existing building not only lacks sufficient space to serve the program needs but the essential form, function and appearance create problems which undermine the rehabilitation goals. Woodside Program Director, Jay Simons, has written a summary of the challenges of this building which is attached in the appendices. The following bullet points summarize elements of his report as well as what we have learned in this process about the deficiencies of the existing building's impact on the Woodside Treatment Program.

- In spite of heroic staff efforts and an innovative rehabilitation program that reflects and even exceeds nationwide best practices, the building looks and feels like a jail and people act accordingly.
- The lack of natural light throughout and any connection to outdoors and nature is not positive.
- Existing outdoor space feels like a prison yard; all the hard surfaces can cause injury when a resident dysregulates.
- The outdoor space is difficult to access. Each of the yards is accessed through a residential unit which potentially means having to move residents of one unit through another in order to gain yard access.
- Residents undergoing dysregulation cannot easily be isolated from others triggering anxiety and spreading the behavior. More quiet spaces are needed.

EXISTING CLASSROOM

EXISTING YARD

- The layout does not allow residents to be segregated by gender, age or needs.
- There are insufficient or non existent spaces for critical program elements such as counseling, treatment, family visits, legal counsel.
- The classroom layout does not work and there are insufficient spaces for critical program elements such as libraries, computers, art, music. The classrooms are spread on two floors and intermixed with other functions which makes it difficult for the residents to feel that they are leaving the unit and 'going to school' for the day.
- Because there is insufficient program space some rooms are used for multiple purposes but since they are interconnected passing through one to access another creates continual distraction and increases the possibility of dysregulation or exposure of private communications during treatment, family visits or meeting with counsel.
- There is insufficient nursing space and no dedicated intake or infirmary
- Medicine does not have a dedicated space or easy way to be distributed, presently they are distributed from the staff offices in each unit which is less secure.
- Staff space needs to be outside the secure zone so they can access personal items and use phones or computers not allowed in the secure area.
- Staff doing 59 hr. shifts do not have sleeping, bath or personal space and what does exist is not isolated from ongoing noise or movement. One infamous staff sleeping space is known as the Batcave. It is a storage closet not really large enough for a mattress off a series of interconnected program space rooms.
- For staff sleeping at night, going to the bathroom can become a journey through multiple locked doors which interrupts sleep cycle.
- The staff sleeping spaces, often closets, are within the secure zone which means they can't use their cell phones or computers to communicate with family.
- The kitchen cooler and freezer are freestanding outdoors requiring staff to go outside to access food. The grill is also outside instead of part of the cooking line.
- There is insufficient storage throughout.
- There is insufficient space for maintenance, housekeeping and BGS personnel and it doesn't have a direct connection to common space or exterior. You need to go through the boiler room and dining/dishwashing/kitchen.
- There are insufficient toilet spaces accessible from program spaces which requires additional staff resources to escort residents to bathrooms especially for the gym which does not have toilet facilities and is remote from the main facility.
- There is insufficient administrative space, only a small conference room and no space for ongoing training of staff.
- Central control is open to the entry lobby. This compromises security and creates distractions for the control personnel.

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# Overview of Other Deficiencies

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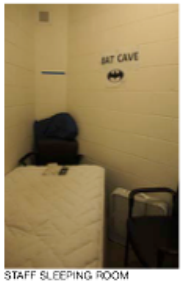
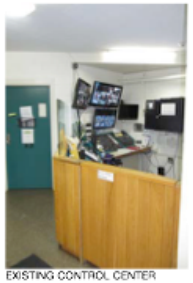
## SPECIFIC TO RESIDENTIAL UNITS

- Resident rooms feel like jail cells.
- Resident room doors swing in instead of out hindering access and safety. This is dangerous for both staff and youth if the staff needs to get a door open.
- Resident rooms have too many unsafe aspects including ligature points (defined as something that can be used to hang from). Rooms provide access to lighting and other elements which can be damaged or weaponized.
- Portions of common space and bathrooms also create unsafe conditions.



STAFF SLEEPING ROOM


EXISTING CONTROL CENTER


EXISTING RESIDENT SLEEPING ROOM

## ACCESSIBILTY

There is a reasonable accessible route to the building on the site.

The existing building does have an elevator but it does not meet modern standards for size and the ability to accommodate a stretcher and rescue personnel.

There is no route to the elevator from common space. The only way to access it is to proceed through the dining room, through dishwashing (clearances do not meet ADA) and then through the kitchen. Not only is this a security issue but the elevator door is often blocked by supplies or the janitorial bucket since the kitchen has insufficient storage space and no janitorial closet.

Resident room doors are too small to meet ADA. The unit bathroom doors appear to meet ADA size but do not comply with all the approach clearances.

The rear egress stairs do not meet current life/safety requirements. The treads are uneven and the stair is too narrow. Ameliorating these problems is difficult as all elements are concrete or masonry.

## BUILDINGS & GENERAL SERVICES RECOMMENDATIONS

BGS have been careful stewards of Woodside, but their stewardship cannot address some underlying core issues. Below is a list of deficiencies identified by BGS staff.

### Site

- Parking lot too small.
- Outside lighting needed / maintenance shop.
- Need outside garage for maintenance equipment. Provide additional storage space with new outbuilding - BGS estimate cost of $50k

### Building

- Windows and doors in sleeping rooms need to be replaced - BGS estimated cost of $150k
- Sleeping areas for staff need to be provided / renovated - BGS estimated cost of $75.
- Update entrance vestibule - BGS estimated cost of $5k
- Entrance to maintenance shop not adequate (need more space) maintenance shop should be separated from facility with sufficient workspace.
- Doors and locks in units not rated for the abuse.
- BGS staff needs a clerical office.
- Not enough custodial closets, floor sinks, or storage space. We need storage for custodial machines and supplies.
- Woodside staff needs a floor sink and closet for custodial services carried out by Woodside staff and possibly training to residents.

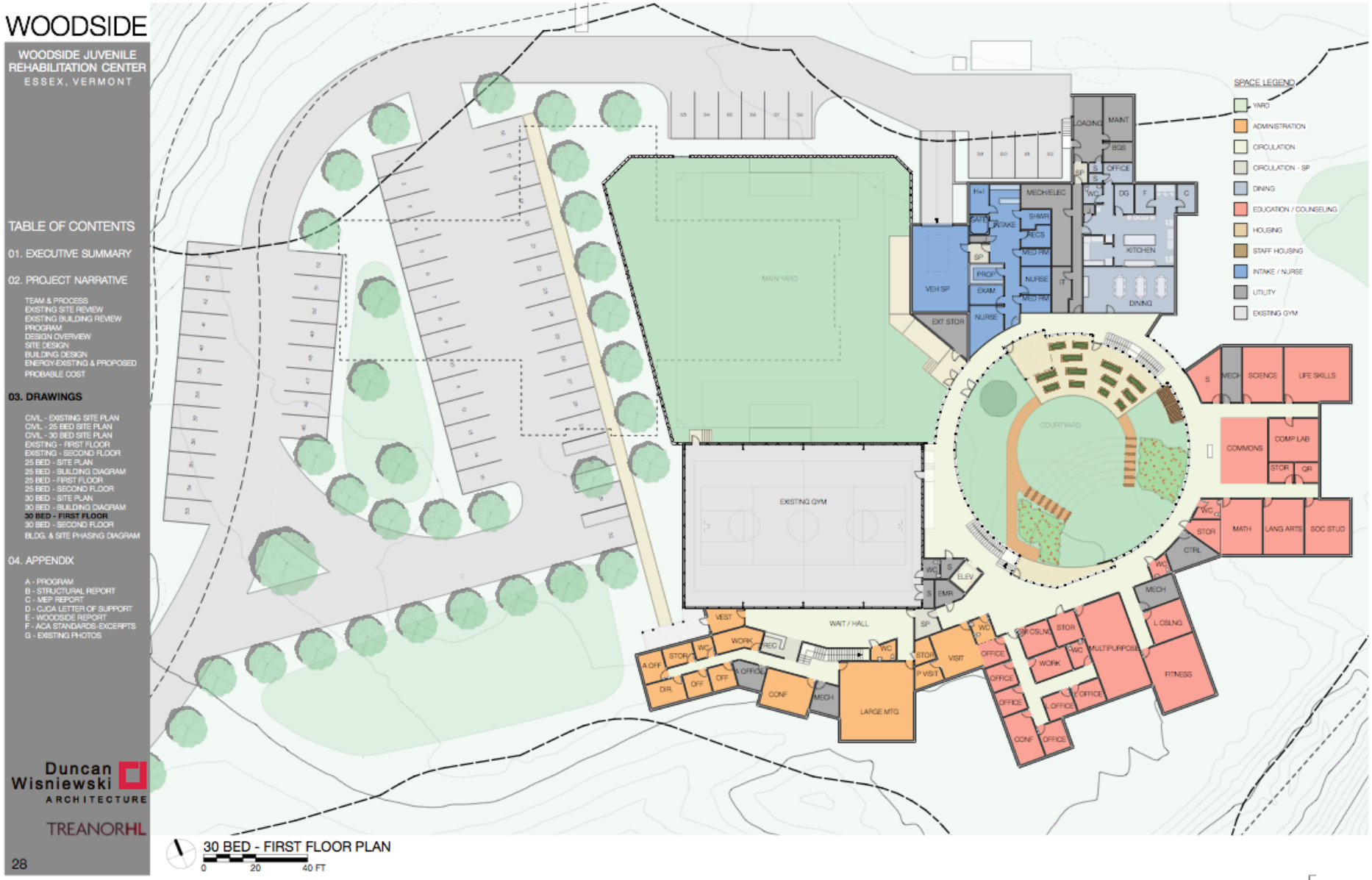
### MEP Issues

- Attic spaces too small to service equipment.
- Smoke detectors in cells damage easily.
- Strobes and horn in bathrooms damage easily.
- Not enough isolation valves in plumbing system.
- Current bathroom surfaces and venting are not adequate.
- Plumbing access panels for service are inadequate.
- Dampers for supply air for boilers have had issues.
- Protected lighting in blue and green areas easily damaged.
- Facility bathrooms need additional venting and surfaces must be durable for this type of facility.

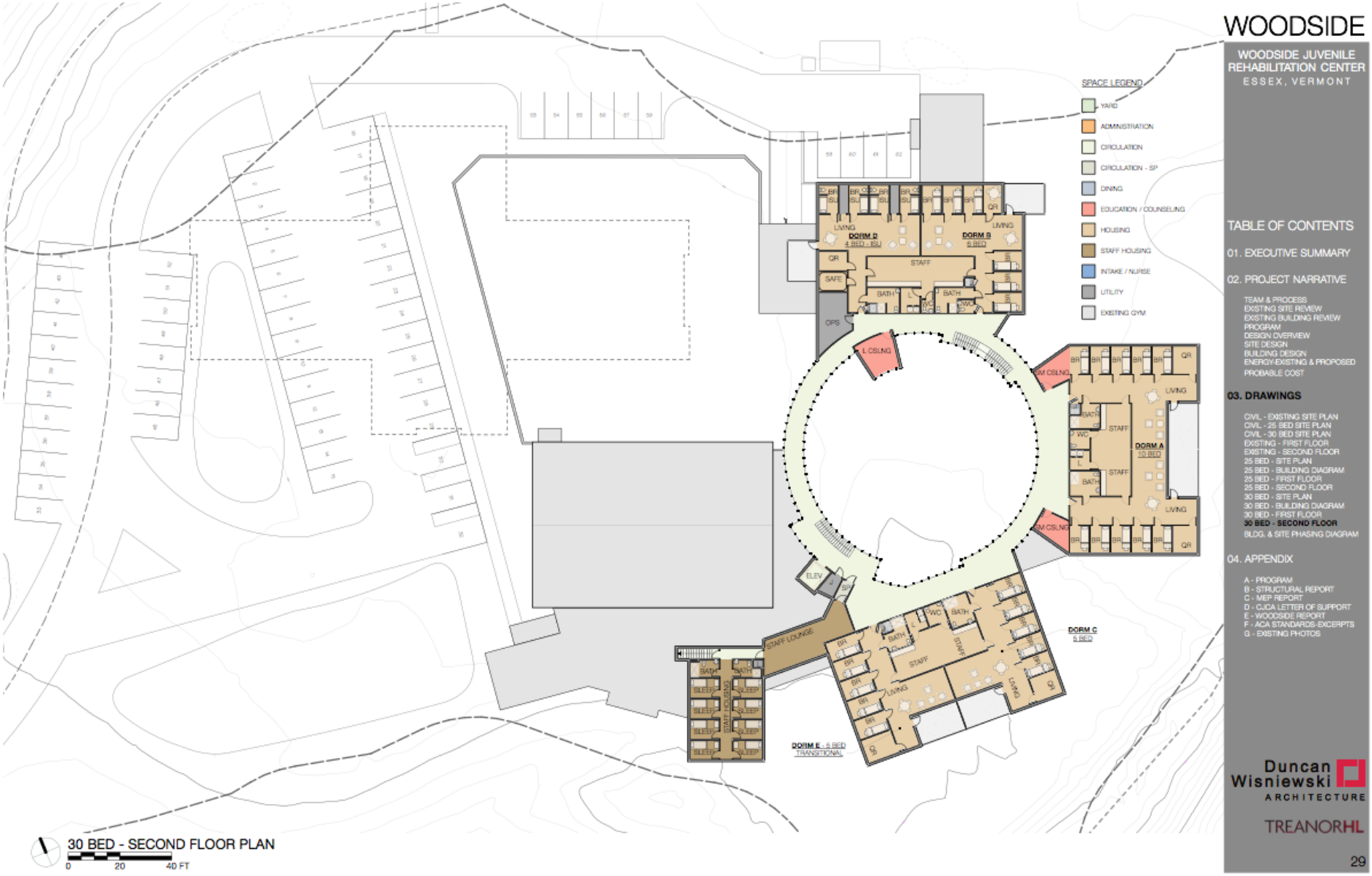
### Gym Issues

- Gym floor and walls not practical for use . They destroyed floor with hard shoes.
- Gym should be attached to the facility via a hallway or tunnel. Currently we have to push equipment thru the other elements.
- Gym sprinkler heads not adequately protected.
- Protect gymnasium walls - BGS estimated cost of $15k

# Proposed New Facility first floor



# Proposed New Facility second floor



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APPENDIX G - EXISTING PHOTOS

EXISTING BUILDING

EXISTING BUILDING ENTRY

EXISTING BUILDING WEST WING

EXISTING PARKING

EXISTING YARD


EXISTING STAFF SLEEPING ROOM

EXISTING YARD

# Existing Facility

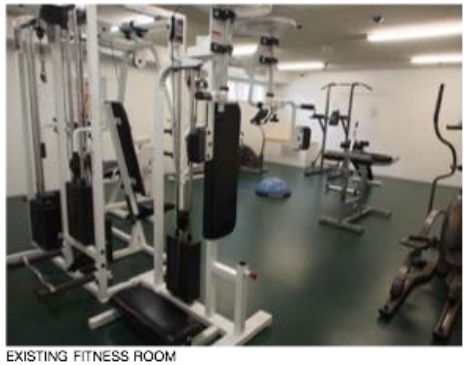

EXISTING RESIDENT SLEEPING ROOM


EXISTING DAYROOM


EXISTING STORAGE ROOM


EXISTING CLASSROOM


EXISTING STAFF OFFICE


EXISTING FITNESS ROOM


EXISTING CONTROL ROOM


EXISTING STAFF OFFICE


EXISTING STAFF OFFICE


EXISTING MECHANICAL LOFT

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# Where we are now:

- Permits – We have consulted with the State, Army Corp of Engineers and the Town, and do not foresee any major issues with permitting a new facility at this site.
- Design – We have a contract in place to begin full design anytime. Design should take 9-12 months.
- Construction – We anticipate construction taking approximately 18 months to complete. We plan to keep the existing facility fully operational during construction of the new facility, saving time, money and effort by not having to find homes for the residents during that time.
- Cost – The 30 bed option is estimated to cost approximately $21,000,000, which includes all project costs.