

# CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

## Policy Session Worksheet

**Presentation Date:** Oct 6, 2015      **Approx. Start Time:** 1:30 PM      **Approx. Length:** 60 min

**Presentation Title:** Parrott Creek Ranch Deferred Maintenance & Capital Campaign

**Department:** County Administration, County Counsel & Facilities Division, Finance

**Presenters:** Laurel Butman, County Administration; Marc Gonzales & Jeff Jorgensen, Finance; Stephen Madkour, County Counsel

**Other Invitees:** Executive Director Linda Winnett, Board Members & Fundraising Consultant, Parrott Creek Ranch; Rick Gruen & Gary Barth, Business & Community Services

### WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Staff is seeking guidance on addressing deferred maintenance and responding to a request for capital support at the Parrott Creek Ranch facilities.

### EXECUTIVE SUMMARY:

The County purchased the property where Parrott Creek Ranch is located with proceeds of a special levy passed by voters for the purpose of “acquisition of property, construction, and first-year operation of a residential ranch facility for boys in need of removal from home but amenable to treatment in the community rather than placement at the State Training School.” The 80 acre property includes, in addition to the facilities, 41 acres of forested land.

Parrott Creek Ranch (Parrott Creek) operates under a lease agreement with the County that calls for the County to perform some maintenance functions. Currently, for many reasons, the Parrott Creek facilities are suffering from prolonged maintenance deferrals. A February 2015 Facility Assessment commissioned by the County identified slightly over \$1 million in deferred maintenance work (inclusive of improvements for code and ADA compliance) that would need to be accomplished to meet all the maintenance deferred needs.

Parrott Creek received two grants in the last three years that focus on technical assistance for board fundraising training and capacity building from the Meyer Memorial Trust. With the Trust’s financial assistance, consulting services were contracted and consequently the board and staff have increased their abilities to raise funds. In addition the board and staff completed a strategic planning process focusing on capacity building with an emphasis on diversifying operational revenue. A plan to launch fee for service (private and insurance pay) offerings to the public was another result of the planning process. This increase in funding is designed to not only underwrite current services but provide revenue for increased demands after the Master Plan is completed.

Recent conversations between the County and Parrott Creek have resulted in a proposal that could meet some of the deferred maintenance needs while at the same time ensuring that non-critical work would not take place in buildings that are planned for replacement. Parrott Creek has proposed that the County invest approximately \$500,000 over three years toward decreasing the maintenance backlog, prioritizing safety and maintenance items.

In parallel, Parrott Creek would continue to plan and launch its capital campaign to realize the Master Plan. In general, foundations do not give large donations for capital campaigns until 40 to 70 percent of the total amount is raised. Parrott Creek Ranch recognizes the strong partnership between the County and Parrott Creek and would see the \$500,000 investment for deferred maintenance as one critical contribution from the County that will allow them to launch their capital campaign. Parrott Creek is also seeking additional seed money from the County to launch its capital campaign.

In addition, to ensure better success in fundraising efforts toward its capital campaign, Parrott Creek desires to update its current lease with the County. This provides both the County and Parrott Creek an opportunity to clarify the roles and responsibilities of both entities. The County has also wanted to update the lease for

some time. This would be an opportunity to set forth in writing the steps toward ultimately conveying a portion or all of the aforementioned real and improved property to Parrott Creek Ranch, an interest of Parrott Creek's as well, provided the facilities conveyed are in good repair. Successfully negotiating an updated lease would be another critical County contribution toward the launch of Parrott Creek's capital campaign.

Parrott Creek plans that any new buildings constructed and any existing facilities upgraded through the Master Plan would be owned and maintained by Parrott Creek. This would relieve the County of the maintenance responsibilities. Given this ownership desire on the part of Parrott Creek and that the property was originally purchased for the creation of a residential ranch facility, it is reasonable to consider the possibility of a no-cost conveyance of a portion or all of the property on which the facilities are built from the County to Parrott Creek. A no-cost conveyance would also ensure that there would be no requirement for Parrott Creek Ranch to repay any of the approximately \$452,000 CDBG funds that the County has invested in Parrott Creek since 1986.

#### Financing Opportunity

Of the 80 total acreage of the property, 41 acres is forest land. A 2014 report from County Parks & Forestry provides a comprehensive analysis of the area and details of a potential timber harvest (Attachment 6). The County could harvest about 1,000 thousand board feet (MBF) from approximately 31 acres of this forest land which has soil well suited to tree planting and growing. There is additional pasture land that could be planted and put to use as well.

The forested area was logged in the 1930s and left to regenerate naturally. Because thinning is not an option due to the quality of the forest, logging here would impact the view shed of two or three neighbors. However, advantages to harvesting the available timber here are that the invasive plants that have overrun the forest could be eradicated and that the area could be replanted with a better mix of trees. This would result in a much healthier forest with enhanced views and habitat and the potential for thinning in years to come without such visible impacts. For purposes of this policy session and discussion, County Parks & Forestry was asked to update the pricing within its 2014 report. Updated pricing revealed that harvesting the timber today as noted above would yield approximately \$350,000, contingent on market conditions at the time of harvest.

In general, revenue from County forest assets in our timber inventory is dedicated to ongoing maintenance of County parks in order to relieve the General Fund from that obligation. The property on which Parrott Creek Ranch is located was originally purchased with levy proceeds approved by the voters for the purpose of establishing a residential ranch facility. Given the strong nexus between the property and Parrott Creek as well as voter intentions, using the proceeds from the initial harvest of the timber for improving Parrott Creek facilities would seem to make sense. However, moving forward toward conveyance of property Parrott Creek, it is possible that the forest property could remain in County ownership as part of its forest asset and timber inventory base. In that case, County Parks & Forestry would bear the long term responsibility managing the young stand for future timber production with future proceeds dedicated to ongoing maintenance of County parks.

#### **FINANCIAL IMPLICATIONS (current year and ongoing):**

Recommendation #1 requires a General Fund investment of \$500,000. Recommendation #2 requires a General Fund investment of \$150,000 augmented by approximately \$350,000 in one-time timber revenue. Recommendation #3 requires a General Fund investment of \$500,000 augmented by approximately \$350,000 in one-time timber revenue.

**LEGAL/POLICY REQUIREMENTS:** None at this time

#### **PUBLIC/GOVERNMENTAL PARTICIPATION:**

County Administration, Finance, and Facilities have collaborated with the Parrott Creek Executive Director and members of the Parrott Creek Board to bring these recommendations forward. If a decision is made to proceed with a timber harvest, we will proceed with the usual public involvement process for timber sales.

**OPTIONS:**

**ROLES & RESPONSIBILITIES**

1. Direct staff to enter into negotiations to update Parrott Creek's lease with the County to clarify roles and responsibilities and address conditions for conveyance of property to Parrott Creek.
2. Direct staff to enter into negotiations to update Parrott Creek's lease with the County to clarify roles and responsibilities but *not* address conditions for conveyance of property.
3. Decline to update Parrott Creek's lease at this time.

**FINANCING**

- A. Direct Finance to put forth a General Fund policy level proposal for the FY 2016-17 budget in the amount of \$500,000 (either one-time or in increments over three years) dedicated to decreasing the amount of deferred maintenance at the Parrott Creek facilities.
- B. Direct Finance to put forth a General Fund policy level proposal for the FY 2016-17 budget in the amount of \$150,000; direct County Forestry to harvest the timber on the property; and direct Finance to dedicate both the General Fund amount (\$150,000) and the timber proceeds (\$350,000, more or less) to decreasing the amount of deferred maintenance at the Parrott Creek facilities.
- C. Direct Finance to put forth a General Fund policy level proposal for the FY 2016-17 budget in the amount of \$500,000 (either one-time or in increments over three years) dedicated to decreasing the amount of deferred maintenance at the Parrott Creek facilities and direct County Forestry to harvest the timber on the property, the proceeds of which (approximately \$350,000) would be dedicated to the Parrott Creek capital campaign.
- D. Decline to address or consider financing at this time.

**RECOMMENDATIONS:**

**ROLES & RESPONSIBILITIES**

Staff respectfully recommends that the Board approve Roles & Responsibilities option #1 directing staff to enter into negotiations to update Parrott Creek's lease with the County to clarify roles and responsibilities and address conditions for conveyance of the facilities and a portion or all of the property to Parrott Creek. *The Parrott Creek staff and Board concur with this recommendation.*

**FINANCING**

Staff respectfully recommends that the Board approve Financing option B or option C and direct staff to proceed accordingly. *The Parrott Creek staff and Board concur with options A and C.*

**ATTACHMENTS:**

1. Existing Facility Assessment by Scott Edwards Architects (February 13, 2015)
2. Parrott Creek Master Plan Phasing Notes
3. Parrott Creek Child & Family Services -Strategic Business Plan Outline
4. Parrott Creek Child & Family Services Board List
5. Parrott Creek Capital Campaign Readiness Paper
6. Timber Harvest Possibilities Parrot Creek Property

**SUBMITTED BY:**

Division Director/Head Approval     JJ    

Department Director/Head Approval   MG  

County Administrator Approval   LSB

## **Attachment 1**

**Existing Facility Assessment by Scott Edwards Architects**

S | E A



**Existing Facility Assessment:**  
**Parrott Creek Ranch**  
February 13, 2015

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  - Proposed Schematic Site Plan
  - Hazardous materials testing results
  - Structural Reports
  - Mechanical / Electrical / Plumbing Reports
  - Civil Report





1.

Project Team

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S|E A



## Project Team

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### Architectural:

Scott Edwards Architecture, LLP (S|EA)  
2525 E Burnside Street  
Portland, OR 97214  
(503) 226.3617

Lisa McClellan           Principal  
Jason Wesolowski       Project Manager

### Structural:

WDY, Inc.  
6443 SW Beaverton-Hillsdale Hwy, Suite 210  
Portland, OR 97221  
(503) 203.8111

Dale DiLoreto           Structural Engineer

### Mechanical/Electrical/Plumbing:

Interface Engineering  
100 SW Main Street, Suite 1600  
Portland, OR 97204  
(503) 382.2266

Mark Koller             Mechanical Engineer  
Thomas Phuong         Electrical Engineer

### Civil:

HHPR  
205 SE Spokane Street, Suite 200  
Portland, OR 97202  
(503) 221.1131

Bruce Haunreiter       Civil Engineer

### Cost Estimator:

Paradigm Construction, LLC  
10260 SW Greenburg Rd., No. 400  
Portland, OR 97223  
(503) 452.6922

Chris Mullin            Cost Estimator

### Owner:

Clackamas County - Facilities Management  
1710 Red Soils Court  
Oregon City, OR 97045  
(503) 734.6248

Jeff Jorgensen           Facilities Manager

### Tenant:

Parrott Creek Child & Family Services  
1001 Molalla Avenue, Suite 209  
Oregon City, OR 97045  
(503) 722.4110

Linda Winnett           Executive Director  
Neil Davies             Director of Residential Programs







## Executive Summary

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In 2010 Parrott Creek Child & Family Services retained Scott|Edwards Architecture to evaluate the existing conditions of the Parrott Creek Ranch facility in regard to general conditions and compliance with current codes. This original study reviewed the current general compliance of the existing facilities with Oregon codes in relation to fire/life safety, accessibility, seismic, lateral, mechanical, electrical and plumbing systems.

With the original Assessment now being five years old, Clackamas County has retained Scott|Edwards Architecture to reevaluate the Parrott Creek Ranch facility and provide a revised Facility Assessment to Clackamas County for consideration. The original report did not include cost estimation. This reevaluation includes budgetary cost estimates for the work discussed in this assessment.

### **Process / Criteria:**

The original study was based on general visual observations conducted during 3 site visits, November 19th, November 30th and December 15th, 2009, conversations and descriptions from the Parrott Creek Ranch personnel and available drawings (see appendix).

The size of each building listed is estimated based on aerial photos or available drawings. Limited field measurements were taken. Limited forms of floor plans and construction drawings were provided by Parrott Creek Child & Family Services and were available at the time of our site visits. Concealed problems within the construction of the buildings may exist that cannot be revealed through our review. All the buildings are assumed to be currently used for their originally constructed purpose. The Occupancy Classification and Construction Type for all buildings shown are based on descriptions from Parrott Creek Ranch personnel along with the visual inspection and will require further evaluation to be verified.

Scott|Edwards Architecture conducted a recent site visit on December 18th, 2014 along with Clackamas County Facilities Management personnel and Parrott Creek Ranch staff to reevaluate the facility conditions in comparison to the original study. In addition to code compliance issues, this report contains deferred maintenance items and facility upgrades to the buildings. The maintenance and upgrade items are based on our site observations and discussions with the Parrott Creek Ranch staff and Facilities Management personnel during our site visit.

### **General:**

Site Address: 22518 S Parrott Creek Rd.  
Oregon City, OR 97045

Map/Taxlot: 32E30 02800

### **Applicable Codes:**

2014 Oregon Structural Specialty Code (OSSC)  
2014 Oregon Electrical Specialty Code (OESC)  
2014 Oregon Mechanical Specialty Code (OMSC)  
2014 Oregon Fire Code (OFC)  
2014 Oregon Plumbing Specialty Code (OPSC)  
2014 Oregon Energy Efficiency Specialty Code (OEESC)

### **Facilities included in this study (See Key Plan in Section 4 for locations):**

Shelter Care Dorm Building  
Farmhouse  
Administration / Living Building  
Residential Care Dorm Building  
School Building  
Storage Building  
Site

## Executive Summary (con't)

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### Conclusion:

The purpose of this investigation was to determine the condition of each building in comparison to minimum fire / life safety, accessibility, structural / seismic, mechanical, electrical and plumbing performance levels as prescribed by the currently adopted codes. Additionally this investigation identifies deferred maintenance items that are needing to be completed to bring the facility back into normal operating and serviceable conditions. Observations, conclusions, and recommendations contained in this report reflect our best professional judgment based on limited visual observation.

Each of the buildings reviewed have various issues in regards to meeting current code. However, in no case do we see any serious hazard to occupants.

In regard to upgrades and improvements to meet current code and/or ADA requirements, if the building's use is not changing, improvements are not required to bring it into compliance with current code unless deemed unsafe by the local jurisdiction. Additionally, when the nature of proposed work is maintenance and/or replacement, current codes will not require a building to be brought into compliance with current codes.

The findings are as follows (See Section 4: Building Evaluations for more detailed evaluations and recommendations on each building):

|                       |  |
|-----------------------|--|
| Admin/Living Building | This building appears relatively structurally sound. However, one beam is noted to be overloaded and several seismic upgrades are recommended to enhance the level of safety. Electrical systems are at full capacity. Mechanical systems are generally in need of replacement.  |
| School Building       | This building appears relatively structurally sound. However, several seismic upgrades are recommended to enhance the level of safety. Mechanical systems are past their design life and in need of replacement. Ceiling texture was sampled and tested positive for asbestos.   |
| Residential Care Dorm | This building appears relatively structurally sound. Seismic ties from the walls to roof are recommended to enhance the level of safety. Mechanical systems are generally in working order.  |
| Farmhouse             | Structural notes a sagging floor in the dining area and rotted columns supporting the entry porch that need to be addressed. Also, several seismic upgrades are recommended to enhance the level of safety. Mechanical systems are generally in working order.   |
| Shelter Care Dorm     | This building was fully renovated six years ago and represents the best code compliance of all buildings on site. However, residential grade materials were used and are showing signs of abuse. Several small seismic upgrades are recommended to enhance the level of safety. Mechanical, electrical and plumbing systems are all relatively new and in good working order. This is the only building equipped with fire sprinklers. |
| Storage Building      | This building appears relatively structurally sound and serves its purpose well. However, the building is being used as program space by the tenant. Visual water damage indicates a possible leak that may need to be fixed to avoid further damage. One area of foundation damage is noted and should be repaired.   |

## Executive Summary (con't)

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### **Conclusion (con't):**

Site

The well on site is in good working order and is adequate to serve the current domestic water needs. No fire sprinklers are provided on site, but will be required on future projects. Sanitary septic systems are currently at or just below capacity. Storm water systems do not meet current code requirements and should be replaced. Parking/drive surfaces are in poor condition and should be replaced. General trash and debris should be removed from the site. Some selective tree pruning should be completed.

### **Hazardous Materials:**

School staff indicated a concern of hazardous materials in the school building and requested that we perform a test to determine the presence of asbestos. A single sample was taken and tested from the ceiling of the School building. Results from that test came back 3% positive for asbestos.

In Oregon, materials with greater than one percent asbestos are regulated as asbestos containing materials (ACMs). Building owners are required to identify ACMs in their buildings and to inform contractors of their locations prior to any remodeling, renovation or demolition activities that could disturb these materials. Encapsulation of ACMs is allowed and is not harmful to building occupants.

Asbestos containing materials are regulated as either friable or nonfriable materials. Friable ACMs are by definition, materials that can be crumbled, pulverized or reduced to powder by hand pressure when dry. Nonfriable ACMs may become friable if they are damaged or become brittle. ACMs do not have to be removed unless they are in poor condition. Usually the repair of damaged ACMs is less cost effective than actual removal. ACMs must be removed if remodeling or demolition activities will impact friable ACM or cause nonfriable materials to become friable.

It is our recommendation that a complete survey of hazardous materials be performed on the entire facility by a licensed professional prior to commencement of any work. Proper containment or removal by a licensed abatement contractor will need to take place on any future project when dealing with any asbestos containing materials.

### **Conditional Use:**

The Parrott Creek Ranch, occupies approximately five acres of a 79 acre site located in Clackamas. The land and buildings are owned and maintained by Clackamas County and leased to the Parrott Creek Child & Family Services for the operation of the Ranch.

The current zoning of this property is EFU (Exclusive Farm Use) which under current zoning does not allow dwellings or residential facilities such as the Parrott Creek Ranch. Parrott Creek Ranch is a non-conforming use under the current zoning and required a non-conforming use review for any future alterations to the property. The EFU zoning has been in place since 1993.

Prior to 1993, the property was zoned as EFU-20. Under this zoning, the residential facility was listed as a conditional use. The EFU-20 zoning has been in place since 1979.

Prior to 1979, the property was zoned as RA-1 (rural single family residential). Under this zoning, the residential facility was listed as a conditional use. The RA-1 zoning has been in place since 1974.

Prior to 1974, the property was not zoned. Interim zoning regulations in effect required the facility be developed under a conditional use. The facility was established in 1968.



## Executive Summary (con't)

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### **Fire Prevention:**

As part of this study, Scott|Edwards Architecture made contact with Doug Whitely of Fire District No. 1 to assess future fire prevention requirements by the local fire marshal. Doug indicated that with the given site location, means of access and square footage of buildings, any future significant alterations or additions made to the buildings will require the addition or inclusion of fire sprinkler systems. This may include a new well, water storage tanks, a pump system, sprinkler heads and piping, etc. Additionally, Doug indicated that if any future expansions or major alterations are proposed to be constructed, an emergency vehicle turn-around area for a fire truck with the appropriate dimensional standards will be required. Regular maintenance projects will not trigger this requirement.

As part of this reevaluation, HHPR contacted Lt. Deputy Fire Marshal Mike Boumann to discuss this facility. Mike confirmed that what we were told previously by Doug is correct and still applies. No new information was given.

### **Maintenance Items:**

The property and buildings on site are owned and maintained by Clackamas County. Our understanding that there is a written lease agreement between Clackamas County and Parrott Creek Child and Family Service that outlines who is responsible for “maintenance” items. We recommend that the items in this report be reviewed in detail between both parties and corrected as deemed necessary.

Our understanding of maintenance items is: normal building maintenance in order to ensure proper functioning of all buildings and systems and to prevent the building from deteriorating over time. Generally we classify these maintenance items into two categories: Water infiltration and Systems.

- **Water infiltration:** Water infiltration into a building will quickly damage interior finishes and over time will cause permanent structural damage if not corrected. We typically see these problems occurring in roofs, windows and crawl spaces.
- **Systems:** This generally covers the systems required to heat and cool a building, protect it from fire, distribute domestic water and dispose of waste water. Typically these systems have a design life within which they are expected to perform their function. Over time they may need to be maintained or repaired. However, at some point it becomes more economical to replace the system with a new one.







## Site Visits

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The site visits consisted of general visual observations and discussions with Parrott Creek staff and Clackamas County maintenance personnel. Some plans and drawings were available before the visits and limited field measurements were taken to verify layout. Concealed problems within the construction of the buildings may exist that were not revealed through these walk throughs.

### November 19th, 2009:

|                  |                      |
|------------------|----------------------|
| Sid Scott        | Principal, SEA       |
| Lisa McClellan   | Project Manager, SEA |
| Jason Wesolowski | Job Captain, SEA     |

### November 30th, 2009:

|                  |   |
|------------------|---|
| Sid Scott        | Principal, SEA                              |
| Lisa McClellan   | Project Manager, SEA                        |
| Jason Wesolowski | Job Captain, SEA                            |
| Dale DiLoreto    | President, WDY Structural - Civil Engineers |
| Mark Koller      | Mechanical Engineer, Interface Engineering  |
| Michael Slevcove | Electrical Engineer, Interface Engineering  |
| Bruce Haunreiter | Civil Engineer, HHPR                        |

### December 15th, 2009:

|                  |                  |
|------------------|------------------|
| Jason Wesolowski | Job Captain, SEA |
|------------------|------------------|

### December 18th, 2014:

|                       |  |
|-----------------------|--|
| Jason Wesolowski      | Project Manager, SEA                                       |
| Neil Davies           | Director, Parrott Creek Ranch                              |
| Jeff Jorgensen        | Facilities Manager, Clackamas County Facilities Management |
| Laurel Butman         | Deputy County Administrator                                |
| Maintenance Personnel | Clackamas County Facilities Management                     |
| Dale DiLoreto         | President, WDY Structural - Civil Engineers                |
| Chris Mullin          | Cost Estimator, Paradigm Construction                      |



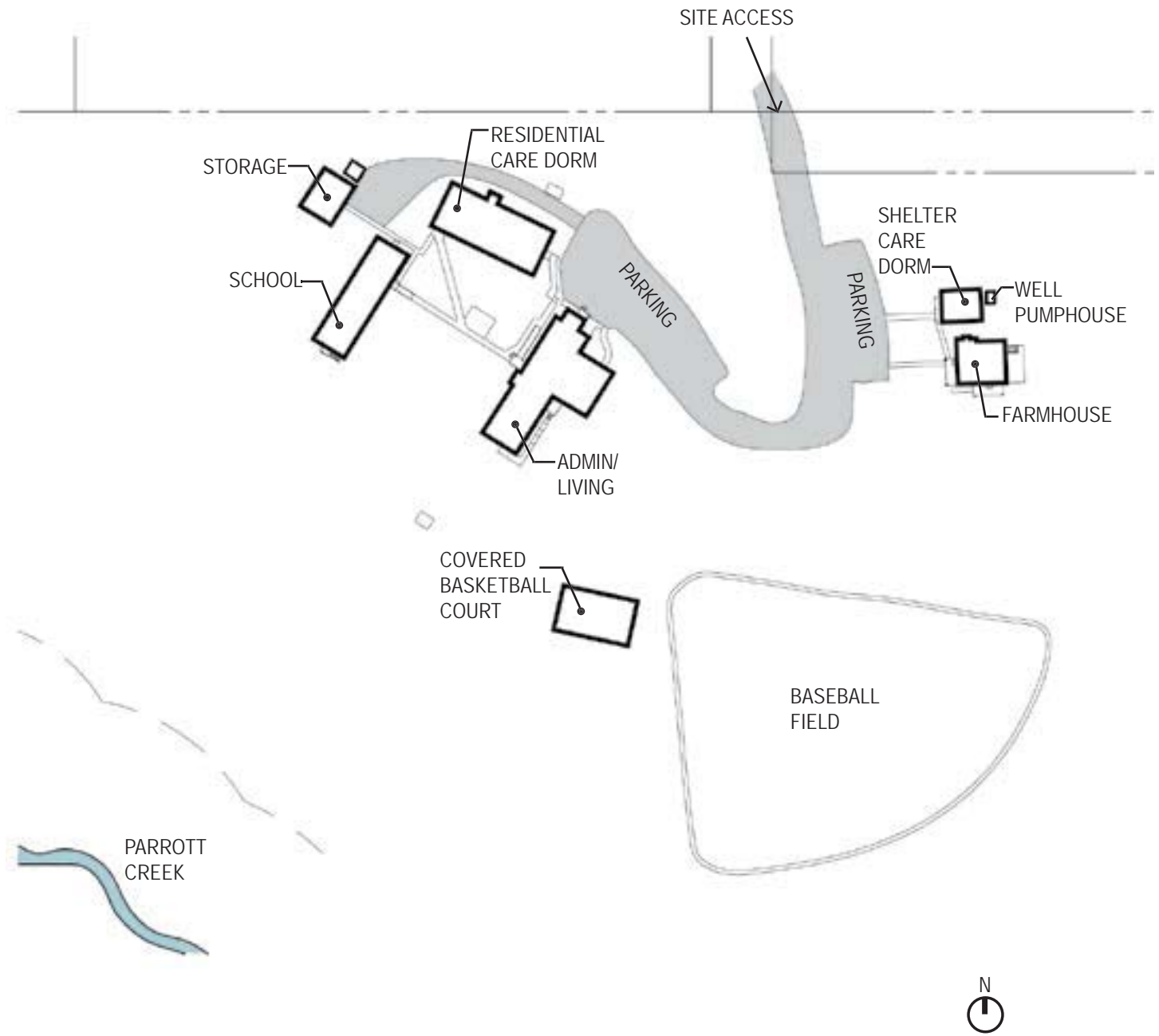






# PARROTT CREEK RANCH COMPLEX: KEY PLAN

NOT TO SCALE



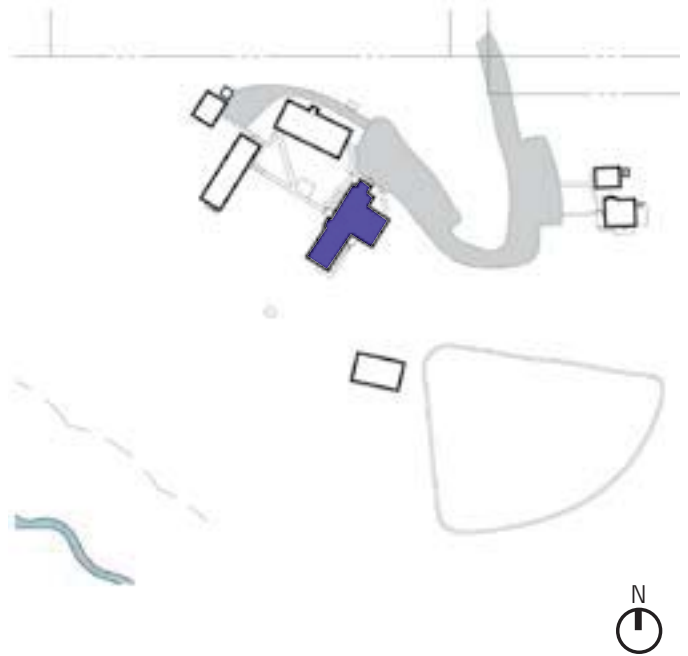


## Administration/Living Building

|                                 |   |
|---------------------------------|---|
| Year of Construction (est.):    | 1968  |
| Use:                            | Administration, kitchen, dining room, recreation lounge, therapy, classroom |
| Occupancy (assumed):            | A-3 (Assembly)<br>B (Business)<br>E (Education)<br>S (Storage)              |
| Type of Construction (assumed): | Type V-B (non-rated)  |
| Occupant Load (est.):           | 214 people  |

**Description:** The structure is estimated to have been built in 1968, generally L-shaped having an approximately 3,400 sf footprint, and single story with a daylight basement off the south end. Several expansions have been made to this building over the years including: office expansion off the NE corner, kitchen expansion off the north end and a porch off the south end was enclosed. The office expansion has a crawl space beneath. The building does not have a fire sprinkler system.

KEY PLAN



### Summary of the Issues

#### Architectural:

The issues generally fall into four categories; exiting, accessibility, finishes and water infiltration.

- **Exiting:** Exit sign over doorway leading from the dining area into the offices is missing and needs to be present. Only one exit is provided from the lower floor of the facility. Code requires 2 exits.
- **ADA Accessibility:** The lower floor of the facility is not readily ADA accessible (i.e. an elevator or accessible route). Also, a rest room facility is not present on the lower floor of the facility. The hand railing of the two ramps do not meet current code requirements.
- **Interior Finishes:** In the dining/recreation/education areas, the existing floor, wall and ceiling finishes are generally worn and in poor condition and should be replaced. In the office addition, the existing floor wall and ceiling finishes are in generally good condition. A few locations

are noted in the basement where window trim is missing.

- **Exterior Finishes:** Roof is approximately 10 years old and in good condition. Gutters show signs of deterioration and should be replaced. (Gutter replacement is currently scheduled to be completed under a separate contract.) Exterior siding and trim are generally in good condition. Areas of minor water damage are evident and should be replaced as necessary. Most windows are missing screens. Entire exterior is in need of new sealants and painting.

- **Water Infiltration:** The office addition at the northeast corner of the building has ongoing moisture issues in the crawl space. Staff reports recent water intrusion at the northwest corner of the basement. Grades at the NE corner slope towards the structure. Parking lot storm water is poorly routed and backs up towards the building. Several locations are noted where exterior grades is within 6 inches of the siding. Maintenance staff indicate that some rain drains are plugged and need to be scoped and unplugged. (Rain drain work is currently scheduled to be completed under a separate contract.)

# Administration/Living Building (con't)

- Other: Staff indicates that water pipes below the kitchen north addition freeze during cold weather. This addition is constructed on piers and the crawl space is open on three sides. A hanging television shelf is installed over the fireplace and appears to be a dangerous condition. Casework at lounge area needs to be secured to the wall.

## Structural:

The building is conventionally residential wood framed construction.

- Gravity Systems: Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past. However, in our opinion it is likely that the center beam beneath the dining hall and recreation room floor does not have adequate capacity to support current code loading criteria.
- Lateral (Seismic) Systems: Based on our visual investigation, the structure seems to have successfully supported the lateral loads it has been subjected to in the past. However, due to the open floor plan of the main level of the dining hall / recreation area, it is likely that the lateral force resisting system in the east/west direction of the main level would not meet current code loading requirements.
- Positive attachment of basement posts to foundations are missing and should be installed.
- Fireplace chimney has suspect cracking and should be inspected and repaired.
- Some gypsum wallboard cracking is evident in the dining space. Additional investigation will need to be done to determine the cause of the cracking and determine if there is a structural issue.

## Electrical:

Based on observations we have noted the following:

- Working clearance at the main electrical panel and sub branch panel in the basement is too small and does not meet current code requirements.
- The main distribution panel is loaded to capacity making additions or changes to the building difficult.
- The kitchen does not appear to be fed with adequate branch circuits to meet appliance needs.

- Interior lighting fixtures are in poor condition. Additionally, the use of T12 lamps is now restricted by code and will be increasingly hard to find when they need to be replaced.

- Surface mounted raceways for the fire alarm cabling is not supported properly at several locations.

- A number of receptacles and cover plates are damaged or missing, others have been coated with wall texture and others are lacking GFI protection required by code.

- Existing battery backup emergency egress lighting does not provide the code required minimum and needs to be upgraded.

- Existing exit signs are not in compliance with current code.

## Mechanical:

Based on observations we have noted the following:

- Two existing split system fan coil units with oil heat are in working condition, but are nearing the end of their design life and are in need of replacement. Condensing units are located on the roof and are also in need of replacement. No outside air is being introduced into the systems.
- The use of through-wall AC units and space heaters indicate that proper heat and cooling distribution is not happening. Test and rebalance as required. Rezoning may be necessary.
- Existing kitchen exhaust fans should be cleaned, tested and balanced as required.
- Kitchen is in need of a makeup air unit to offset the two existing exhaust fan units.

## Plumbing:

Based on observations we have noted the following:

- Fixtures in the kitchen rest room are in need of replacement.
- Two water heaters appear to be in good working condition.
- No drinking fountain is present in the basement. Code requires a minimum of one in an E occupancy.

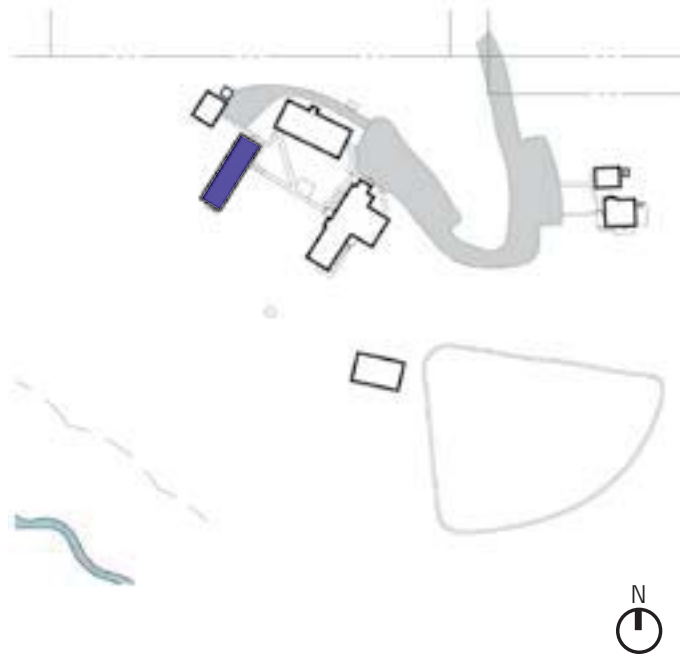


## School Building

|                                 |  |
|---------------------------------|--|
| Year of Construction (est.):    | 1968   |
| Use:                            | School, laundry                              |
| Occupancy (assumed):            | E (Education)<br>B (Business)<br>S (Storage) |
| Type of Construction (assumed): | Type V-B (non-rated)                         |
| Occupant Load (est.):           | 49 people                                    |

**Description:** This single story building has a footprint of approximately 1,900 SF and is rectangular in shape. The building has a concrete foundation with a crawl space and utilizes conventional wood framed residential construction. It has plywood siding and an asphalt composition roof. The building does not have a fire sprinkler system.

KEY PLAN



## Summary of the Issues

### Architectural:

The issues generally fall into three categories; accessibility, finishes and hazardous materials.

- **ADA Accessibility:** Rest room fixture clearances do not meet current code requirements. The ramp up to the building exceeds the allowable slope by ADA. Also, the hand railing does not meet code requirements. A 2" floor elevation change near the rest room does not meet code requirements.
- **Interior Finishes:** The existing floor, wall and ceiling finishes are generally worn and in poor condition and should be repaired/replaced.
- **Exterior Finishes:** Roof is approximately 10 years old and in good condition. Gutters show signs of deterioration and should be replaced. (Gutter replacement is currently scheduled to be completed under a separate contract.) Exterior siding and trim are generally in good condition.

Areas of minor water damage are evident and should be replaced as necessary. Most windows are missing screens. Entire exterior is in need of new sealants and painting.

- **Hazardous Materials:** A sample taken from the ceiling of the classroom has tested positive for asbestos. The complete extent of hazardous materials throughout the campus is unknown. We recommend that the Owner hire a HAZMAT consultant to complete a hazardous materials study for the entire campus prior to performing any future work.

# School Building (con't)

## **Structural:**

The building is conventionally residential wood framed construction.

- Gravity Systems: Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past.
- Lateral (Seismic) Systems: Due to the open floor plan of the classroom and amount of wall opening, it is likely that the lateral force resisting system of the east wall would not meet current code loading requirements.
- Positive attachment of crawl space posts to the foundation should be installed.
- Due to lack of crawl space interior footing embedment, post bases or footing should be positively connected together with struts.

## **Electrical:**

Based on observations we have noted the following:

- Existing battery backup emergency egress lighting does not provide the code required minimum and needs to be upgraded.
- Fire alarm pull station is mounted too high to meet ADA code requirements.
- Existing receptacles are not tamper resistant, but are not required by code. Voluntary upgrade to tamper resistant is recommended.

- Interior lighting fixtures are in poor condition. Additionally, the use of T12 lamps is now restricted by code and will be increasingly hard to find when they need to be replaced.

## **Mechanical:**

Based on observations we have noted the following:

- Existing fan coil and condensing unit appear to be past their design life and need replacement. No outside air is being introduced into the system.
- An exhaust fan should be installed in the janitor closet.
- Bathroom exhaust system should be tested and re-balanced.

## **Plumbing:**

Based on observations we have noted the following:

- Condensate drain pan not present causing water damage.
- Fixtures do not meet ADA code and need to be replaced.
- Staff indicate that the sanitary sewer backs up frequently.

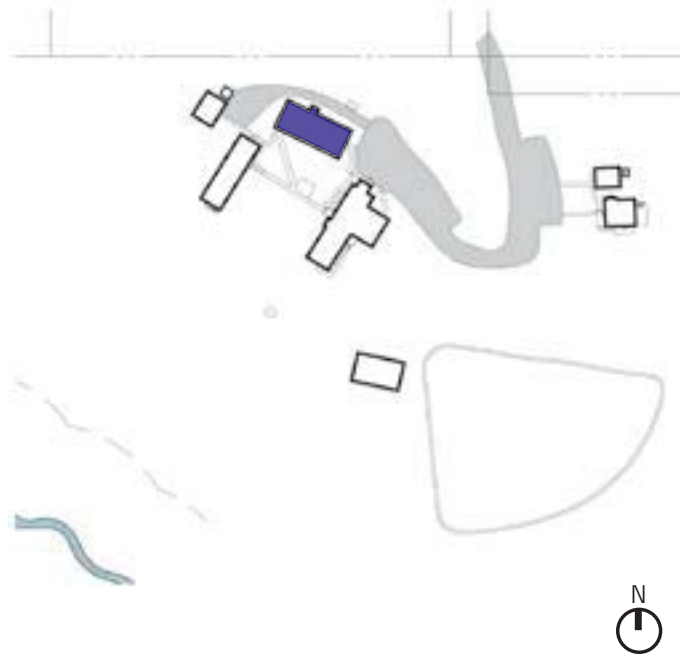


## Residential Care Dorm Building

|                                 |                               |
|---------------------------------|-------------------------------|
| Year of Construction (est.):    | 1986                          |
| Use:                            | Residential dorm              |
| Occupancy (assumed):            | I-1 (Institutional)           |
| Type of Construction (assumed): | Type V-B (non-rated)          |
| Occupant Load (est.):           | 21 people<br>(21 actual beds) |

**Description:** This single story dormitory has a footprint of approx. 2,400 SF and is rectangular in shape. The building has a concrete slab on grade foundation, concrete block walls and a 2x wood truss roof system. Concrete block is painted on the exterior. Roofing is asphalt composition. The building does not have a fire sprinkler system.

KEY PLAN



### Summary of the Issues

#### Architectural:

The issues generally fall into four categories; accessibility, finishes, doors and Frames, and lighting.

- **ADA Accessibility:** Toilet clearances do not meet current code requirements. This was considered under the previous rest room renovation, but no changes were made due to cost. For the purpose of this study, no changes are proposed since this issue was recently considered.
- **Interior Finishes:** The existing floor, wall and ceiling finishes are generally worn and in poor condition and should be repaired/replaced. The bathroom floor finish was recently replaced and is in fair condition. Window coverings are in poor condition and should be replaced.
- **Door and Frames:** Most of the doors and frames are damaged and need to be replaced. (This work is currently scheduled to be completed under a separate contract.)

- **Exterior Finishes:** Roof is approximately 10 years old and in good condition. Gutters show signs of deterioration and should be replaced. (Gutter replacement is currently scheduled to be completed under a separate contract.) Most windows are missing screens. Entire exterior is in need of new sealants and painting. Areas of minor water damage at the gable ends are evident and should be replaced as necessary.

- **Lighting:** Interior lighting levels and quality are very poor. New vandal-resistant lighting is recommended.

#### Structural:

The building is constructed using CMU walls and a wood framed roof truss system.

- **Gravity Systems:** Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past.
- **Lateral (Seismic) Systems:** Based on our visual investigation, the structure seems to have successfully supported the lateral loads it has been subjected to in the past.

# Residential Care Dorm Building (con't)

## **Structural (con't):**

- Positive attachment of exterior and interior walls to roof system needs to be added. (This work is currently scheduled to be completed under a separate contract.)

## **Electrical:**

Based on observations we have noted the following:

- Working clearance at the main electrical panel and sub branch panel in the fire riser room is too small and does not meet current code requirements.
- Existing battery backup emergency egress lighting does not provide the code required minimum and needs to be upgraded.
- Existing exit signs are not in compliance with current code.
- Fire alarm pull station is mounted too high to meet ADA code.
- Existing receptacles are not tamper resistant, but are not required by code. Voluntary upgrade to tamper resistant is recommended.
- Arc-fault circuit interrupters are not installed at outlet locations required by code.

## **Mechanical:**

Based on observations we have noted the following:

- Maintenance personnel indicated that the HVAC systems have been revamped in this building only. Outside air has been introduced to the system.

- An access door needs to be added to the gable end to allow access for maintenance of the air handling unit in the attic space.

- It appears that the outside air is being drawn in through an existing gable end vent. Additional attic venting should be added to compensate for this.

- Consider replacing air diffusers for better air distribution and user comfort. Test and rebalance.

## **Plumbing:**

Based on observations we have noted the following:

- Three instantaneous propane water heaters appear to be in working condition.
- Rest room and shower facilities have been remodeled within the past few years and appear to meet current code requirements.

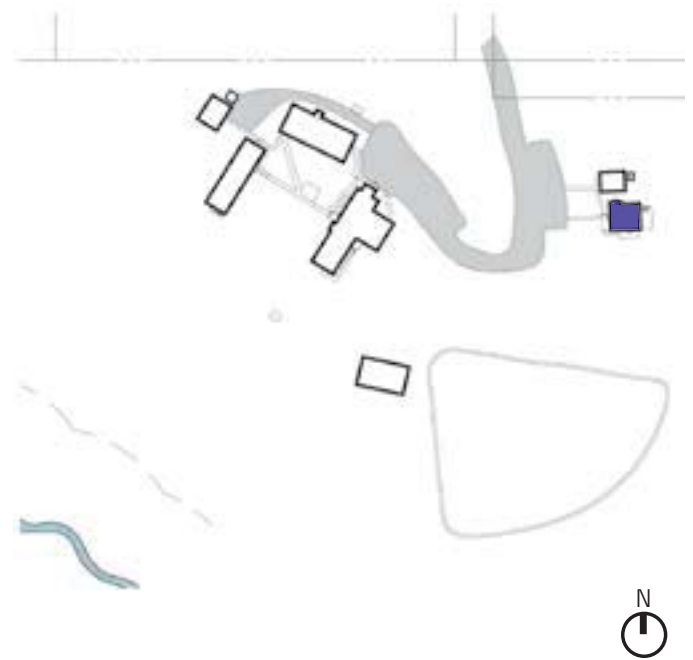


## Farmhouse

|                                 |                               |
|---------------------------------|-------------------------------|
| Year of Construction (est.):    | 1940's                        |
| Use:                            | Classroom, office             |
| Occupancy (assumed):            | E (Education)<br>B (Business) |
| Type of Construction (assumed): | Type V-B (non-rated)          |
| Occupant Load (est.):           | 40 people                     |

**Description:** This single story house has a footprint of approx. 925 SF, is generally rectangular in shape and has a full basement and partial attic. The basement serves primarily for utilities, storage and laundry. The attic is used primarily for storage. The building has a concrete foundation and utilizes conventional wood framed residential construction. It has wood lap siding and an asphalt composition roof. A wood framed entry porch is built off the front of the structure. A wood framed patio cover is framed off the south side of the structure. The building does not have a fire sprinkler system.

KEY PLAN



## Summary of the Issues

### Architectural:

The issues generally fall into six categories; accessibility, finishes, attic, basement, water intrusion and oil tank.

- **ADA Accessibility:** This farmhouse was originally constructed as a single family home and is generally a tough space to meet all ADA requirements. There is no accessible route to access this building. All plumbing fixture clearances do not meet current code requirements. S|E A recommends that at a minimum, an accessible entry into the building be constructed.
- **Interior Finishes:** The existing floor, wall and ceiling finishes are generally worn and in poor condition and should be repaired/replaced.
- **Exterior Finishes:** Roof is approximately 10 years old, but mostly moss covered. No roof leaks are apparent. Roof should be cleaned and treated. Gutters are relatively new. Exterior siding and trim are generally in good

condition. Areas of minor water damage are evident and should be replaced as necessary. Most windows are missing screens. Kitchen window is a single-hung window installed on its side as a slider and should be reinstalled properly. Entire exterior is in need of new sealants and painting.

- **Attic:** Ceiling height is 6'-9" which does not meet code minimum for an occupied space. This limits the use of this space to storage.
- **Basement:** Ceiling height is 6'-10" which does not meet code minimum for an occupied space. Additionally, the support beam height is 6'-4" and the duct height is 6'-1".
- **Water Intrusion:** Staff indicate that the basement has had water intrusion at times in the past. At this time we propose no work since this is an unoccupied space. Storage should be kept up off the floor to avoid water damage.
- **Oil Tank:** Heating systems are supplied by an underground oil tank located to the north of the building. No signs of leakage are apparent.



# Farmhouse (con't)

## Civil:

Based on observations we have noted the following:

- Grading to the north of the building slopes towards the building and should be reworked to provide surface drainage away from the structure.

## Structural:

The building is conventionally residential wood framed construction.

- Gravity Systems: Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past. (With exceptions noted below.)
- Lateral (Seismic) Systems: Based on our experience with similar aged structures, it is likely that the exterior walls are not positively attached to the basement walls. It is likely that the lateral force resisting system would not meet current code loading requirements.
- It is likely that the center beam below the main floor does not have adequate capacity to support current code loading criteria.
- It is likely that the roof/ceiling framing does not have adequate capacity to support current code loading criteria.
- Basement posts should be raised off the basement floor and positive attachments installed at the tops and bottoms of the posts.
- Deflected floor framing is noted between the kitchen and dining area. A finished ceiling below prevented further investigation to the cause of the problem. The deflected floor framing should be further investigated and necessary repairs made.
- Main entry porch supports have rotted at the base causing the roof structure to sag. Additionally, no footings are present and posts bear on the porch slab. The slab has settled and broken at the supporting corners. (This work is currently scheduled to be completed under a separate contract.)

- Side patio cover has been replaced and appears to meet current code requirements.

## Electrical:

Based on observations we have noted the following:

- This building is an old farmhouse with an electrical installation typical of a single family residence built at the time of original construction.
- Electrical receptacles are not in locations per current code. Extension cords and power strips are being used to compensate for this.
- Receptacles are old and do not have the required grounding plug per current code and should be replaced.
- Existing receptacles are not tamper resistant, but are not required by code. Voluntary upgrade to tamper resistant is recommended.
- GFCI outlets are not installed per current code requirements.
- Arc-fault interrupters are not installed at outlet locations per current code requirements.

## Mechanical:

Based on observations we have noted the following:

- All existing HVAC equipment appears to be relatively new and in working order.

## Plumbing:

Based on observations we have noted the following:

- This building is an old farmhouse with a plumbing installation typical of a single family residence built at the time of original construction.
- Fixtures do not meet ADA code and need to be replaced. However, fixture clearances will not be resolved by fixture replacement.

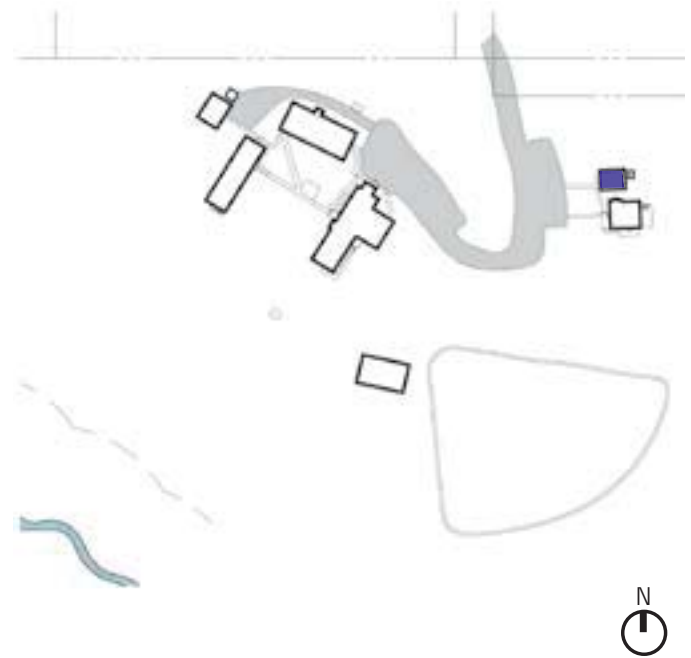


## Shelter Care Dorm Building

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Year of Construction (est.):    | Various                           |
| Use:                            | Dormitory, office                 |
| Occupancy (assumed):            | R-2 (Dormitories)<br>B (Business) |
| Type of Construction (assumed): | Type V-B (non-rated)              |
| Occupant Load (est.):           | 11 people<br>(6 actual beds)      |

**Description:** This single story dormitory building has a footprint of approximately 550 SF and is rectangular in shape. The building appears to be a converted garage structure with a slab on grade foundation. Recent construction drawings indicate that its construction utilizes conventional wood framed residential construction. The siding and roofing are corrugated metal. A wood framed entry porch is built off the front of the structure. This building only has a fire sprinkler system.

KEY PLAN



## Summary of the Issues

### Architectural:

The issues generally fall into two categories; accessibility and finishes.

- **ADA Accessibility:** Door threshold at main entry appears to be just beyond ADA requirements. Replace with ADA compliant threshold.
- **Interior Finishes:** The existing floor, wall and ceiling finishes are generally worn and in poor condition and should be repaired/replaced. All interior doors are relatively new, but are hollow core and showing signs of abuse. Consider replacement of interior doors and hardware with solid core and Grade 1 hardware.
- **Exterior Finishes:** Age of the metal roof is unknown, but shows signs of rust. Staff did not note any roof leakage, but replacement should be considered. Gutters show signs of deterioration and should be replaced. (Gutter replacement is currently scheduled to be completed under a separate contract.)

rate contract.) Exterior siding and trim are generally in good condition with one exception at the east side. Areas of water damage should be replaced as necessary. Most windows are missing screens. Entire exterior is in need of new sealants and painting.

### Civil:

Based on observations we have noted the following:

- **Grading:** to the south and east of the building slopes towards the building and should be reworked to provide surface drainage away from the structure.

### Structural:

The building is conventionally residential wood framed construction.

- **Gravity Systems:** Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past.

# Shelter Care Dorm Building (con't)

## **Structural (con't):**

- Lateral (Seismic) Systems: Based on our visual investigation, the structure seems to have successfully supported the lateral loads it has been subjected to in the past.
- Positive attachment of entry posts to foundations should be installed.
- Existing grades should be reworked to ensure drainage away from structure to avoid further water damage and decay.
- Porch beam is decayed and should be replaced with positive connections to posts. Decayed edge porch rafters should be replaced.

## **Electrical:**

Based on observations we have noted the following:

- Structure is relatively new and appears to comply with current code.
- Existing battery backup emergency egress lighting meets code required minimums.
- Arc-fault circuit interrupters are not installed at locations required by code.

## **Mechanical:**

Based on observations we have noted the following:

- Structure appears new and complies with current code.

## **Plumbing:**

Based on observations we have noted the following:

- Structure appears new and complies with current code.
- Mechanical closet is not locked allowing users to store items in the closet. Install locking hardware on the closet and maintain clearances around the water heater and fire riser.
- Mechanical closet needs to be labeled "Fire Riser Room" to meet code requirements.
- Staff noted that the toilet has had leaking problems.
- Fire water supply is noted to enter the building as 1/2" and then up sizes to 3/4". The system is being supplied off of the domestic well water system. This does not meet any modern codes. This system was installed relatively, therefore we can only assume that some agreement was made with the County officials to install a system that does not meet code. At this point in time we recommend doing nothing to resolve this as resolutions will be very costly. If, at some point in time in the future, major renovations and/or additions are built, a system will be required to be installed. At that time this building can be tied into the new system, making it compliant with code. No cost information is included in this assessment.

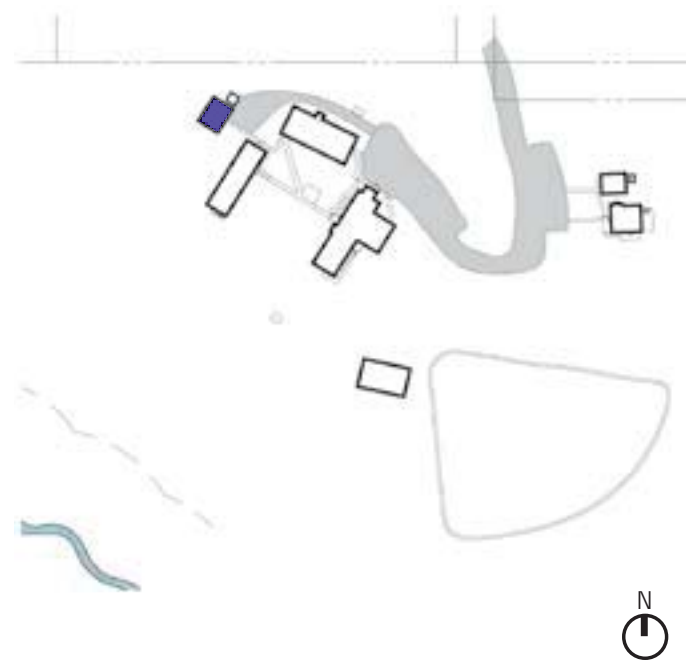


## Storage Building

|                                 |                      |
|---------------------------------|----------------------|
| Year of Construction (est.):    | Unknown              |
| Use:                            | Storage              |
| Occupancy (assumed):            | S-1                  |
| Type of Construction (assumed): | Type V-B (non-rated) |
| Occupant Load (est.):           | 3 people             |

**Description:** A single story storage building with a footprint of 720 SF and is rectangular in shape. The building has a slab on grade foundation with wood framed walls and 2x wood truss roof construction. The siding and roofing is corrugated metal. The building has only electricity and no other utilities. It is used for the storage of maintenance materials and equipment. The building does not have a fire sprinkler system.

KEY PLAN



## Summary of the Issues

### Architectural:

The issues generally fall into one category; finishes.

- **General:** Tenant is storing miscellaneous items here along with hazardous maintenance type items. Staff also indicate that they have used the space for music therapy in the past.
- **Interior Finishes:** The existing wall and ceiling finishes show signs of water damage indicating a roof leak. Water damage appears to have increased since the original assessment was performed. Mold is suspected as indicated below. We recommend that all wall and ceiling finishes be removed. Wall surfaces should be replaced with moisture resistant gypsum board or plywood.
- **Exterior Finishes:** Age of the metal roof and gutters is unknown, but signs of rust are apparent. Staff did not note any roof leakage. Roofing and/or gutters are leaking and should be replaced. Exterior metal siding is generally in

good condition. All sealants should be replaced.

- **Other:** The air is noticeably stagnant, humid and smells musty. There is likely mold present within this building. Lack of mechanical ventilation is likely the reason.
- **Toilet facilities** are not provided in this building, but are provided in an adjacent building. Travel distance to the nearest facilities is 120'.

### Structural:

The building is conventionally residential wood framed construction with a slab-on-grade foundation.

- **Gravity Systems:** Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past. (Exception noted below.)

# Storage Building (con't)

## **Structural (con't):**

- Lateral (Seismic) Systems: Based on our visual investigation, the structure seems to have successfully supported the lateral loads it has been subjected to in the past.
- Roof leaks should be repaired to avoid damage to structure.
- Existing grades should be reworked to ensure drainage away from structure to avoid water damage and decay.
- Foundation repairs should be made at the northwest corner of the building to mitigate settlement.

## **Electrical:**

Based on observations we have noted the following:

- Electrical was not included in this survey. However, lighting is old and not code compliant. When ceiling finishes are removed, consider replacement of surface mounted lighting fixtures.

## **Mechanical:**

Based on observations we have noted the following:

- No mechanical present.

## **Plumbing:**

Based on observations we have noted the following:

- No plumbing present.

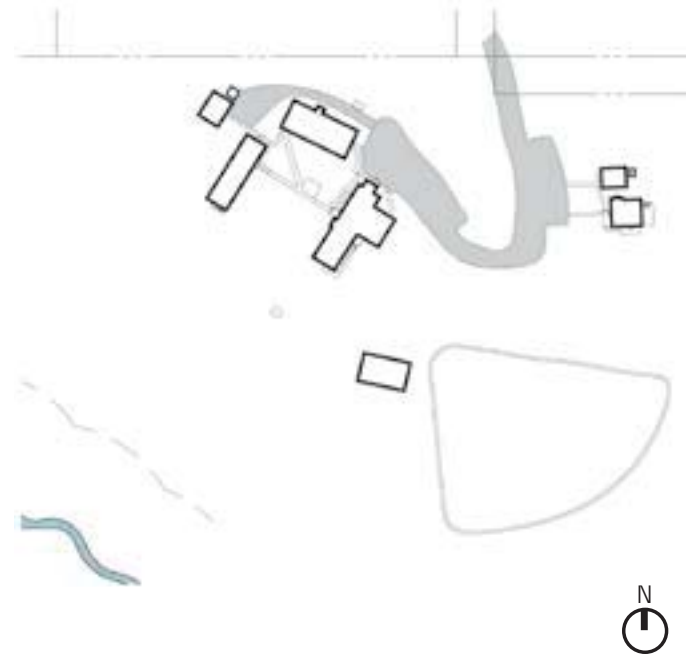


## Site

Year of Construction (est.): Various  
 Zoning: EFU (Exclusive Farm Use)  
 Acreage: 79 acres

**Description:** The site consists of approximately 79 acres with varied grades between 2% and 20%. Parrott Creek flows across the site from east to west, dividing the site into two halves. Several small waterways feed into Parrott Creek. Parrott Creek Ranch occupies approximately 5 acres on the northern side of the creek. Existing improvements include a farmhouse, Shelter Care dormitory, administration/living building, Residential Care dormitory, School building and a storage building. Also on site are parking areas, a ball field and a covered basketball court.

KEY PLAN



## Summary of the Issues

### Architectural:

The issues generally fall into five categories; basketball court, accessibility, concrete walks, fire access and general cleanup.

- **Basketball Court:** The covered basketball court structure appears to be in sound condition. However, the metal roof is of an unknown age does appear to be leaking. A retaining wall should be considered around the north and east sides of the structure. Additionally, the structure posts are located at the edge of the court and are a safety concern. Post padding should be considered to increase the level of safety.
- **ADA Accessibility:** An accessible route is not provided down to the basketball court or ball field. Handicap parking and an accessible route into the buildings is not provided. An accessible route linking the upper campus to the lower campus does not exist and should be added.
- **Concrete Walks/Patios:** All concrete walks and patios at

the Farmhouse and Shelter Care Dorm is cracked, pitting and settling and should be replaced. The remainder of the concrete walks are in reasonable condition and should be cleaned. Selective replacement only at areas with poor condition.

- **Fire Access:** The site does not have an adequate turn-around space for a fire truck. The Fire Marshal indicated that any significant alterations or additions on site will require the addition of a turn-around space of adequate size. We recommend that a turn-around be added at the same time the parking lot is repaved to allow for future expansion of the facility and increased safety for the facility users.
- **General Cleanup:** Various piles of debris are scattered around the site and need to be cleaned up. Also, a number of trees are in need of pruning and limbing where they pose a hazard.

## Site (con't)

### **Structural (Basketball Court Cover):**

The building is a pole type manufactured structure, single story and open on all sides.

- **Gravity Systems:** Based on our visual investigation, the structure seems to have successfully supported the gravity loads it has been subjected to in the past.

### **Civil:**

Based on observations we have noted the following:

- **Water Service:** Site is served by a well located adjacent to the farmhouse in a small wood shed. It appears that the well has the required setback from the septic drain field. A series of tanks located in the basement of the farmhouse are used to store and treat the well water before it is distributed to the buildings. The condition of the underground water distribution system is unknown. However, maintenance personnel made comments about the pipe being problematic.
- **Flow characteristics of the well** were tested as part of this project. Test results revealed that the well has adequate flow capacity for current and future needs. However, the pump system may not be adequate to meet the needs of an expansion. Increasing the pump size could resolve this. Adding additional pressure tanks or adding an additional well are other measures that would accommodate additional loads.
- There is no fire/sprinkler service on site with the exception of the Small Dormitory. The Fire Marshal will require that any proposed additions or alterations incorporate a fire sprinkler system. This was confirmed with the new Fire Marshal.

- **Sanitary Sewer Service:** The site is served by two separate septic systems, a small system serving the two upper buildings and a larger system serving the three larger buildings. Basic calculations show the small system to be at capacity. Modifications and/or additions would require additional measures be added to this system. The larger system is shown to be just below capacity. Small additions or alterations may be okay, but any significant additions or alterations would require additional measures to be added to this system.

- **Storm Sewer:** Storm water runoff generally moves to the south towards existing drainage ways on site. Several buildings have storm water systems that connect to a storm main beneath the site. The storm main crosses the site, traveling beneath the dormitory and discharges onto grade at the south slope of the site. Several catch basins that drain the parking areas connect to this storm main. In addition, this line collects water from a drainage way to the north of the site. This main pipe should be relocated. New systems should be put in place to meet the size and needs of any future improvements. Improvements to the site will also require the addition of on-site storm water management for impervious parking areas.

- **Surfacing conditions:** Existing parking surfaces are in poor condition. They appear to have base failure, evident by alligator cracking and depressions. Seal-coating and/or overlaying the parking area is not recommended due to the poor condition of the existing pavement and failure of the subbase.









## Cost Estimate

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As part of this Existing Facilities Assessment, Clackamas County asked that a cost estimate be provided for all items addressed herein. This cost information will be used by the County to provide guidance for budgeting of maintenance costs. The costs included in this assessment shall be considered budgetary and do not represent actual construction costs.

Many of the items discussed in this assessment are general and/or schematic in nature. No design work was included as part of this assessment. As such, the cost estimate is also schematic in nature. Every effort was made to understand each item of this assessment and apply budgetary dollar amounts required to complete or correct each item.

This cost estimate is developed with the assumption that all items will be completed as one contiguous construction project over a designated period of time. This represents the most cost effective way to perform the work. If the County chooses to break work out into separate smaller projects, note that the general conditions costs will increase from those represented in this cost estimate.

The cost estimate is broken out by each building. Site work is broken out separate as well. The cost of each identified item is then broken down into four main categories of work: Maintenance, Non-conforming Code, Non-conforming ADA, and Safety Hazard. The following is a definition to each of these categories:

**Maintenance:**

Items that are in need of regular or deferred maintenance or, in some cases, replacement. These items should be considered necessary to bring the facility back into serviceable condition. These items are not code deficiencies.

**Non-conforming Code:**

General items that do not meet current code requirements. These items are existing conditions and code does not require that they be brought into code conformance. However, if building alterations or additions are proposed at some point in time, these non-conforming items may be required to be addressed.

**Non-conforming ADA:**

These items are specific to ADA accessibility that do not meet current code requirements. These items are existing conditions and code does not require that they be brought into code conformance. However, if building alterations or additions are proposed at some point in time, these non-conforming items may be required to be addressed.

**Safety Hazard:**

These items appear to pose some level of threat, though it may be small, to the building occupants. These items should be strongly considered to provide safety to the building occupants. These items are not code deficiencies.

Work associated with the buildings themselves is fairly straight forward, therefore scope can be pretty closely anticipated. Work associated with the site however, can be fairly vague. For the purposes of the cost estimate, a Proposed Schematic Site Plan was developed to establish a baseline the cost estimator could work with. This site plan represents a quick study of the parking and turn-around layout based on the foreseen requirements. The Proposed Schematic Site Plan can be found in Appendix B.



**Parrott Creek Ranch**

Estimate

February 12, 2015

| Description of Allowance            | Quantity | Units | Cost/Unit   | Code Cost | ADA Cost | Safety Cost | Maintenance Cost | Total Cost | Comments |
|-------------------------------------|----------|-------|-------------|-----------|----------|-------------|------------------|------------|----------|
| <b>GENERAL CONDITIONS</b>           |          |       |             |           |          |             |                  |            |          |
| Supervision                         | 500      | hrs   | \$ 75.00    |           |          |             |                  | \$ 37,500  |          |
| Office Trailer                      | 3        | mo    | \$ 600.00   |           |          |             |                  | \$ 1,800   |          |
| Drop Box                            | 3        | ea    | \$ 800.00   |           |          |             |                  | \$ 2,400   |          |
| Chemical Toilet                     | 3        | mo    | \$ 150.00   |           |          |             |                  | \$ 450     |          |
| Temp Fencing                        | 1        | LS    | \$ 800.00   |           |          |             |                  | \$ 800     |          |
| Temporary Power Hookup              | 1        | LS    | \$ 500.00   |           |          |             |                  | \$ 500     |          |
| Safety & Temporary Protection       | 1        | LS    | \$ 2,000.00 |           |          |             |                  | \$ 2,000   |          |
| Office Supplies                     | 1        | LS    | \$ 1,000.00 |           |          |             |                  | \$ 1,000   |          |
| Periodic Cleaning                   | 96       | hrs   | \$ 50.00    |           |          |             |                  | \$ 4,800   |          |
| Final Cleaning                      | 1        | LS    | \$ 6,000.00 |           |          |             |                  | \$ 6,000   |          |
| <b>General Conditions Subtotal:</b> |          |       |             |           |          |             |                  | \$ 57,250  |          |

**COST OF WORK**

**ADMINISTRATION BUILDING**

|  |       |    |               |            |            |          |           |            |   |
|--|-------|----|---------------|------------|------------|----------|-----------|------------|---|
| Dining Area Exit Sign  | 1     | ea | \$ 200.00     | \$ 200     |            |          |           | \$ 200     |   |
| Lower Floor 2nd Exit   | 1     | LS | \$ 32,200.00  | \$ 32,200  |            |          |           | \$ 32,200  | Excavation, Concrete, Railings, Door, Opening     |
| Elevator (includes credit for chimney inspection and repairs)    | 1     | LS | \$ 111,540.00 |            | \$ 111,540 |          |           | \$ 111,540 | Framed Shaft, Pit, Elevator, MEP, Roofing, Siding |
| ADA Ramp Railings  | 1     | LS | \$ 6,500.00   |            | \$ 6,500   |          |           | \$ 6,500   |   |
| Lower Floor Restroom   | 1     | LS | \$ 18,175.00  |            | \$ 18,175  |          |           | \$ 18,175  | Walls, Finishes, MEP, Floor Finishes, Accessories |
| Dining/Rec/Ed Flooring   | 3000  | sf | \$ 5.00       |            |            |          | \$ 15,000 | \$ 15,000  |   |
| Dining/Rec/Ed Wall/Ceiling Finishes (Repair and Repaint)         | 14600 | sf | \$ 0.85       |            |            |          | \$ 12,410 | \$ 12,410  |   |
| Add Drinking Fountain  | 1     | LS | \$ 1,500.00   | \$ 1,500   |            |          |           | \$ 1,500   |   |
| Basement Window Trim   | 9     | ea | \$ 500.00     |            |            |          | \$ 4,500  | \$ 4,500   |   |
| Repair Exterior Water Damage                                     | 1     | LS | \$ 2,000.00   |            |            |          | \$ 2,000  | \$ 2,000   |   |
| Exterior Painting and Sealants                                   | 5200  | sf | \$ 1.00       |            |            |          | \$ 5,200  | \$ 5,200   |   |
| Re-grade Around NE Office Addition                               | 1     | LS | \$ 1,500.00   |            |            |          | \$ 1,500  | \$ 1,500   |   |
| Reinforce Beam Beneath Dining Hall                               | 1     | LS | \$ 8,600.00   | \$ 8,600   |            |          |           | \$ 8,600   | Sister add'l 2x material and associated hardware  |
| Lateral Load Upgrades?   | 1     | LS | \$ 54,000.00  | \$ 54,000  |            |          |           | \$ 54,000  | 30 lf Shear Wall per side, add holddowns at 6' OC |
| Positive Attachment of Basement Column Bases                     | 5     | ea | \$ 500.00     | \$ 2,500   |            |          |           | \$ 2,500   |   |
| Inspect & Repair Chimney Cracks                                  | 1     | LS | \$ 2,500.00   |            |            | \$ 2,500 |           | \$ 2,500   |   |
| Replace electrical panel with higher capacity panel              | 1     | LS | \$ 2,000.00   | \$ 2,000   |            |          |           | \$ 2,000   |   |
| Reconstruct electrical room walls for proper clearances          | 1     | LS | \$ 3,950.00   | \$ 3,950   |            |          |           | \$ 3,950   |   |
| Additional Kitchen Circuits                                      | 4     | ea | \$ 250.00     | \$ 1,000   |            |          |           | \$ 1,000   |   |
| Replace all lighting fixtures                                    | 90    | ea | \$ 200.00     | \$ 18,000  |            |          |           | \$ 18,000  |   |
| Additional Support for Low Voltage Raceways                      | 1     | LS | \$ 500.00     | \$ 500     |            |          |           | \$ 500     |   |
| Replace Cover Plates and Install GFI Protection                  | 1     | LS | \$ 1,700.00   | \$ 1,700   |            |          |           | \$ 1,700   |   |
| Provide Additional Emergency Lighting                            | 30    | ea | \$ 220.00     | \$ 6,600   |            |          |           | \$ 6,600   |   |
| Replace Existing Exit Signs                                      | 10    | ea | \$ 200.00     | \$ 2,000   |            |          |           | \$ 2,000   |   |
| Replace Split Systems and Add Outside Air (Incl. test & balance) | 1     | LS | \$ 6,250.00   |            |            |          | \$ 6,250  | \$ 6,250   |   |
| Clean & Adjust Kitchen Exhaust Fan                               | 1     | LS | \$ 250.00     |            |            |          | \$ 250    | \$ 250     |   |
| Add Kitchen Makeup Air   | 1     | LS | \$ 750.00     |            |            |          | \$ 750    | \$ 750     |   |
| Replace Kitchen Restroom Plumbing Fixtures                       | 1     | LS | \$ 1,200.00   | \$ 1,200   |            |          |           | \$ 1,200   |   |
| Insulate Pipes Below Kitchen North Addition                      | 1     | LS | \$ 1,000.00   | \$ 1,000   |            |          |           | \$ 1,000   |   |
| Window Insect Screen Replacement                                 | 26    | ea | \$ 75.00      |            |            |          | \$ 1,950  | \$ 1,950   |   |
| Misc (secure cabinets, replace tv shelf, minor regrading, etc.)  | 1     | LS | \$ 1,000.00   |            |            |          | \$ 1,000  | \$ 1,000   |   |
| <b>Subtotal:</b>   |       |    |               | \$ 136,950 | \$ 136,215 | \$ 2,500 | \$ 50,810 | \$ 326,475 |   |

**SCHOOL BUILDING**

|  |      |    |              |           |          |          |           |           |   |
|--|------|----|--------------|-----------|----------|----------|-----------|-----------|---|
| Restroom Fixture Clearance                     | 1    | LS | \$ 2,800.00  |           | \$ 2,800 |          |           | \$ 2,800  |   |
| Rebuild ADA Ramp                               | 1    | LS | \$ 2,500.00  |           | \$ 2,500 |          |           | \$ 2,500  |   |
| Replace ADA Ramp Railings                      | 1    | LS | \$ 4,500.00  |           | \$ 4,500 |          |           | \$ 4,500  |   |
| Repair 2" Floor Elevation Change at Restroom   | 1    | LS | \$ 500.00    |           | \$ 500   |          |           | \$ 500    |   |
| Replace Floor Finishes                         | 1920 | sf | \$ 5.00      |           |          |          | \$ 9,600  | \$ 9,600  |   |
| Repair and Repaint Wall/Ceiling Finishes       | 7160 | sf | \$ 0.85      |           |          |          | \$ 6,086  | \$ 6,086  |   |
| Repair Exterior Water Damage                   | 1    | LS | \$ 2,000.00  |           |          |          | \$ 2,000  | \$ 2,000  |   |
| Exterior Painting and Sealants                 | 2496 | sf | \$ 1.00      |           |          |          | \$ 2,496  | \$ 2,496  |   |
| Lateral Load Upgrades?                         | 1    | LS | \$ 44,252.00 |           |          |          | \$ 44,252 | \$ 44,252 | 30 lf Shear Wall per side, add holddowns at 6' OC |
| Positive Attachment of Crawlspace Column Bases | 20   | ea | \$ 500.00    | \$ 10,000 |          |          |           | \$ 10,000 |   |
| Struts at Footings                             | 31   | ea | \$ 350.00    | \$ 10,850 |          |          |           | \$ 10,850 | 4x4 grid from column to column                    |
| Upgrade Emergency Lighting                     | 16   | ea | \$ 220.00    |           |          |          | \$ 3,520  | \$ 3,520  |   |
| Relocate Fire Alarm Pull Station               | 1    | LS | \$ 150.00    |           | \$ 150   |          |           | \$ 150    |   |
| Tamper Resistant Outlets                       | 30   | ea | \$ 100.00    |           |          | \$ 3,000 |           | \$ 3,000  |   |
| Replace all lighting fixtures                  | 35   | ea | \$ 200.00    | \$ 7,000  |          |          |           | \$ 7,000  |   |
| Replace Split Systems and Add Outside Air      | 1    | LS | \$ 6,250.00  |           |          |          | \$ 6,250  | \$ 6,250  |   |

**Parrott Creek Ranch**

Estimate

February 12, 2015

| Description of Allowance                               | Quantity | Units | Cost/Unit    | Code Cost | ADA Cost  | Safety Cost | Maintenance Cost | Total Cost | Comments                                      |
|--|----------|-------|--------------|-----------|-----------|-------------|------------------|------------|---|
| Install Exhaust Fan at Janitor Closet                  | 1        | LS    | \$ 750.00    | \$ 750    |           |             |                  | \$ 750     |   |
| Test & Adjust Restroom Exhaust                         | 1        | LS    | \$ 250.00    |           |           |             | \$ 250           | \$ 250     |   |
| Add Condensate Pan at Water Heater                     | 1        | LS    | \$ 250.00    | \$ 250    |           |             |                  | \$ 250     |   |
| Replace Plumbing Fixtures with ADA Compliant           | 1        | LS    | \$ 2,800.00  |           | \$ 2,800  |             |                  | \$ 2,800   |   |
| Scope or RotoRooter for Waste Lines                    | 1        | LS    | \$ 250.00    |           |           |             | \$ 250           | \$ 250     |   |
| Window Insect Screen Replacement                       | 22       | ea    | \$ 75.00     |           |           |             | \$ 1,650         | \$ 1,650   |   |
| <b>Subtotal:</b>                                       |          |       | \$ 28,850    | \$ 13,250 | \$ 3,000  | \$ 76,354   | \$ 121,454       |            |   |
| <b>RESIDENTIAL CARE DORM BUILDING</b>                  |          |       |              |           |           |             |                  |            |   |
| Replace Floor Finishes (Restroom to remain)            | 2400     | sf    | \$ 5.00      |           |           |             | \$ 12,000        | \$ 12,000  |   |
| Repair and Repaint Wall/Ceiling Finishes               | 9276     | sf    | \$ 0.85      |           |           |             | \$ 7,885         | \$ 7,885   |   |
| Repair Exterior Water Damage                           | 1        | LS    | \$ 1,500.00  |           |           |             | \$ 1,500         | \$ 1,500   |   |
| Exterior Painting and Sealants                         | 2120     | sf    | \$ 1.00      |           |           |             | \$ 2,120         | \$ 2,120   |   |
| New Vandal Resistant Interior Lighting                 | 35       | ea    | \$ 250.00    |           |           | \$ 8,750    |                  | \$ 8,750   |   |
| Electrical Panel Clearance?                            | 1        | LS    | \$ 19,400.00 | \$ 19,400 |           |             |                  | \$ 19,400  | Extend existing CMU Mech Room, Relocate Panel |
| Upgrade Emergency Lighting                             | 15       | ea    | \$ 100.00    | \$ 1,500  |           |             |                  | \$ 1,500   |   |
| Replace Exit Signs                                     | 5        | ea    | \$ 200.00    | \$ 1,000  |           |             |                  | \$ 1,000   |   |
| Relocate Fire Alarm Pull Station                       | 1        | ea    | \$ 150.00    | \$ 150    |           |             |                  | \$ 150     |   |
| Tamper Resistant and Arc Fault Interrupters at Outlets | 44       | ea    | \$ 100.00    | \$ 4,400  |           |             |                  | \$ 4,400   |   |
| Install Attic Access Panel at Gable End                | 1        | LS    | \$ 1,200.00  | \$ 1,200  |           |             |                  | \$ 1,200   |   |
| Additional Attic Venting                               | 6        | ea    | \$ 400.00    | \$ 2,400  |           |             |                  | \$ 2,400   |   |
| Replace Diffusers                                      | 26       | ea    | \$ 175.00    |           |           |             | \$ 4,550         | \$ 4,550   |   |
| Window Insect Screen Replacement                       | 5        | ea    | \$ 75.00     |           |           |             | \$ 375           | \$ 375     |   |
| <b>Subtotal:</b>                                       |          |       | \$ 29,900    | \$ 150    | \$ 8,750  | \$ 28,430   | \$ 67,230        |            |   |
| <b>FARMHOUSE</b>                                       |          |       |              |           |           |             |                  |            |   |
| Add Accessible Entry to Building                       | 1        | LS    | \$ 17,100.00 | \$ 17,100 |           |             |                  | \$ 17,100  | Concrete Ramp/Porch, Railings, Stairs         |
| Replace Floor Finishes                                 | 896      | sf    | \$ 5.00      |           |           |             | \$ 4,480         | \$ 4,480   |   |
| Repair and Repaint Wall/Ceiling Finishes               | 3784     | sf    | \$ 0.85      |           |           |             | \$ 3,216         | \$ 3,216   |   |
| Roof cleaning and treatment                            | 1        | LS    | \$ 750.00    |           |           |             | \$ 750           | \$ 750     |   |
| Repair Exterior Water Damage                           | 1        | LS    | \$ 2,000.00  |           |           |             | \$ 2,000         | \$ 2,000   |   |
| Remove and Re-install Window                           | 1        | LS    | \$ 500.00    |           |           |             | \$ 500           | \$ 500     |   |
| Exterior Painting and Sealants                         | 1680     | sf    | \$ 1.00      |           |           |             | \$ 1,680         | \$ 1,680   |   |
| Rework Grade at North End of the Building              | 1        | LS    | \$ 1,500.00  |           |           |             | \$ 1,500         | \$ 1,500   |   |
| Lateral Load Upgrades?                                 | 1        | LS    | \$ 21,400.00 | \$ 21,400 |           |             |                  | \$ 21,400  | Shear at all four corners, holdowns at 6' OC  |
| Reinforce Beam in Basement?                            | 1        | ea    | \$ 2,700.00  | \$ 2,700  |           |             |                  | \$ 2,700   |   |
| Reinforce Entry Roof Structure                         | 1        | LS    | \$ 2,500.00  | \$ 2,500  |           |             |                  | \$ 2,500   |   |
| Add Positive Attachments at Basement Column Ends       | 3        | ea    | \$ 1,000.00  | \$ 3,000  | \$ 3,000  | \$ 3,000    | \$ 3,000         | \$ 12,000  |   |
| Investigate/Repair Deflected Floor at Kitchen/Dining   | 1        | LS    | \$ 3,500.00  |           |           | \$ 3,500    |                  | \$ 3,500   |   |
| Add Electrical Outlets (Tamper Resistant)              | 14       | ea    | \$ 150.00    |           |           | \$ 2,100    |                  | \$ 2,100   |   |
| Replace Electrical Outlets (Tamper Resistant)          | 14       | ea    | \$ 100.00    |           |           | \$ 1,400    |                  | \$ 1,400   |   |
| Add GFCI Outlets                                       | 4        | ea    | \$ 100.00    | \$ 400    |           |             |                  | \$ 400     |   |
| Add Arc Fault Interrupters at Outlets                  | 22       | ea    | \$ 100.00    | \$ 2,200  |           |             |                  | \$ 2,200   |   |
| Replace Plumbing Fixtures with ADA Compliant           | 1        | LS    | \$ 1,100.00  | \$ 1,100  |           |             |                  | \$ 1,100   |   |
| Window Insect Screen Replacement                       | 12       | ea    | \$ 75.00     |           |           |             | \$ 900           | \$ 900     |   |
| <b>Subtotal:</b>                                       |          |       | \$ 32,200    | \$ 21,200 | \$ 10,000 | \$ 18,026   | \$ 81,426        |            |   |
| <b>SHELTER CARE DORM BUILDING</b>                      |          |       |              |           |           |             |                  |            |   |
| Replace Main Entry Door Threshold with ADA Compliant   | 1        | ea    | \$ 150.00    | \$ 150    |           |             |                  | \$ 150     |   |
| Replace Floor Finishes                                 | 546      | sf    | \$ 5.00      |           |           |             | \$ 2,730         | \$ 2,730   |   |
| Repair and Repaint Wall/Ceiling Finishes               | 1488     | sf    | \$ 0.85      |           |           |             | \$ 1,265         | \$ 1,265   |   |
| New Solid Core Wood Doors & Hardware                   | 4        | ea    | \$ 1,000.00  |           |           |             | \$ 4,000         | \$ 4,000   |   |
| Replace Metal Roof                                     | 654      | sf    | \$ 15.00     |           |           |             | \$ 9,810         | \$ 9,810   |   |
| Repair Exterior Water Damage                           | 1        | LS    | \$ 2,000.00  |           |           |             | \$ 2,000         | \$ 2,000   |   |
| Exterior Painting and Sealants                         | 940      | sf    | \$ 1.00      |           |           |             | \$ 940           | \$ 940     |   |
| Re-grade at South and East Elevations                  | 1        | LS    | \$ 1,500.00  |           |           |             | \$ 1,500         | \$ 1,500   |   |
| Add Positive Attachments at Entry Posts                | 3        | ea    | \$ 500.00    | \$ 1,500  |           |             |                  | \$ 1,500   |   |
| Replace Porch Beam and Edge Rafters                    | 1        | LS    | \$ 1,800.00  |           |           |             | \$ 1,800         | \$ 1,800   |   |
| Add Arc Fault Interrupters at Outlets                  | 8        | ea    | \$ 100.00    | \$ 800    |           |             |                  | \$ 800     |   |
| Add Lockset at Mechanical Closet Door                  | 1        | ea    | \$ 250.00    |           |           | \$ 250      |                  | \$ 250     |   |
| Add Signage at Mechanical Closet Door                  | 1        | ea    | \$ 75.00     | \$ 75     |           |             |                  | \$ 75      |   |
| Repair Toilet Leak                                     | 1        | LS    | \$ 250.00    |           |           |             | \$ 250           | \$ 250     |   |
| Window Insect Screen Replacement                       | 2        | ea    | \$ 75.00     |           |           |             | \$ 150           | \$ 150     |   |
| <b>Subtotal:</b>                                       |          |       | \$ 2,375     | \$ 150    | \$ 250    | \$ 24,445   | \$ 27,220        |            |   |
| <b>STORAGE BUILDING</b>                                |          |       |              |           |           |             |                  |            |   |
| Demo Wall/Ceiling Finishes                             | 1        | LS    | \$ 1,500.00  |           |           |             | \$ 1,500         | \$ 1,500   |   |

## Parrott Creek Ranch

Estimate

February 12, 2015

| Description of Allowance                         | Quantity | Units | Cost/Unit        | Code Cost       | ADA Cost    | Safety Cost      | Maintenance Cost | Total Cost       | Comments  |
|--|----------|-------|------------------|-----------------|-------------|------------------|------------------|------------------|---|
| Treat Structure for Mold                         | 1        | LS    | \$ 1,200.00      |                 |             |                  | \$ 1,200         | \$ 1,200         |   |
| Replace Wall Finishes (no geiling finishes)      | 1400     | sf    | \$ 2.85          |                 |             |                  | \$ 3,990         | \$ 3,990         |   |
| Replace Roof & Gutters                           | 864      | sf    | \$ 14.00         |                 |             |                  | \$ 12,096        | \$ 12,096        |   |
| Re-Caulk Building Exterior                       | 1        | LS    | \$ 800.00        |                 |             |                  | \$ 800           | \$ 800           |   |
| Re-grade at Areas that Drain Toward the Building | 1        | LS    | \$ 1,500.00      |                 |             |                  | \$ 1,500         | \$ 1,500         |   |
| Remove and Replace Building Slab where Settling  | 1        | LS    | \$ 11,700.00     |                 |             | \$ 11,700        |                  | \$ 11,700        | Demolish existing, excavate foundation, pour back |
| Replace Ceiling Light Fixtures                   | 7        | ea    | \$ 200.00        | \$ 1,400        |             |                  |                  | \$ 1,400         |   |
| Install passive attic ventilaiton                | 4        | ea    | \$ 400.00        | \$ 1,600        |             |                  |                  | \$ 1,600         |   |
|  |          |       | <b>Subtotal:</b> | <b>\$ 3,000</b> | <b>\$ -</b> | <b>\$ 11,700</b> | <b>\$ 21,086</b> | <b>\$ 35,786</b> |   |

**SITE**

|   |      |    |              |  |          |           |           |           |   |
|---|------|----|--------------|--|----------|-----------|-----------|-----------|---|
| Replace Metal Roof and Gutters on BB Court              | 1650 | sf | \$ 14.00     |  |          |           | \$ 23,100 | \$ 23,100 |   |
| Install Retaining Wall at North & East Side of BB Court | 1    | LS | \$ 14,500.00 |  |          |           | \$ 14,500 | \$ 14,500 | Based on 50 lf of 4' high keystone retaining wall |
| Install Column Padding around BB Court Perimeter        | 16   | ea | \$ 400.00    |  |          | \$ 6,400  |           | \$ 6,400  |   |
| Provide ADA Accessible Route to BB Court                | 1040 | ea | \$ 9.50      |  | \$ 9,880 |           |           | \$ 9,880  |   |
| Replace Concrete Walks at Farmhouse & Shelter Care      | 475  | sf | \$ 9.50      |  |          | \$ 4,513  |           | \$ 4,513  |   |
| Concrete Path from Upper Buildings to Lower             | 1600 | sf | \$ 9.50      |  |          | \$ 15,200 |           | \$ 15,200 |   |
| Clean Balance of Concrete Walks on Site                 | 1    | LS | \$ 500.00    |  |          |           | \$ 500    | \$ 500    |   |
| Replace Water Distribution Piping                       | 1    | LS | \$ 17,030.00 |  |          |           | \$ 17,030 | \$ 17,030 |   |
| Replace Site Storm Main                                 | 260  | lf | \$ 50.00     |  |          |           | \$ 13,000 | \$ 13,000 |   |

## Parrott Creek Ranch

Estimate

February 12, 2015

| Description of Allowance                             | Quantity | Units | Cost/Unit        | Code Cost        | ADA Cost        | Safety Cost      | Maintenance Cost  | Total Cost        | Comments  |
|--|----------|-------|------------------|------------------|-----------------|------------------|-------------------|-------------------|---|
| Add Storm Water Treatment Facility & Swale           | 1        | ea    | \$ 37,250.00     | \$ 37,250        |                 |                  |                   | \$ 37,250         |   |
| Re-Pave/Improvements at Drive Aisle and Parking Area | 1        | LS    | \$ 105,755.00    |                  |                 |                  | \$ 105,755        | \$ 105,755        | Paving, 150 lf wall, curbs, CMU enclosure, striping |
| Tree Pruning and Debris Cleanup                      | 1        | LS    | \$ 5,000.00      |                  |                 | \$ 5,000         |                   | \$ 5,000          |   |
| Emergency Vehicle Turn Around, Curbs, Excavating     | 1        | LS    | \$ 22,565.00     | \$ 22,565        |                 |                  |                   | \$ 22,565         | Excavation, pavement, curbs                         |
| <b>Subtotal:</b>                                     |          |       | <b>\$ 59,815</b> | <b>\$ 59,815</b> | <b>\$ 9,880</b> | <b>\$ 31,113</b> | <b>\$ 173,885</b> | <b>\$ 274,693</b> |   |

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|  |                               |                   |           |                |           |               |           |                |           |                |
|--|-------------------------------|-------------------|-----------|----------------|-----------|---------------|-----------|----------------|-----------|----------------|
|  | <b>Cost of Work Subtotal:</b> | <b>\$ 293,090</b> | <b>\$</b> | <b>180,845</b> | <b>\$</b> | <b>67,313</b> | <b>\$</b> | <b>393,036</b> | <b>\$</b> | <b>934,283</b> |
|--|-------------------------------|-------------------|-----------|----------------|-----------|---------------|-----------|----------------|-----------|----------------|

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**PROJECT SUMMARY**

|                                     |                              |
|-------------------------------------|------------------------------|
| General Conditions                  | \$ 57,250                    |
| Cost of Work                        | \$ 934,283                   |
|                                     | Project Subtotal: \$ 991,533 |
| Insurance Cost (1%)                 | \$ 9,915                     |
| Overhead & Profit (3%)              | \$ 30,043                    |
| <b>Base Bid Construction Total:</b> | <b>\$ 1,031,492</b>          |





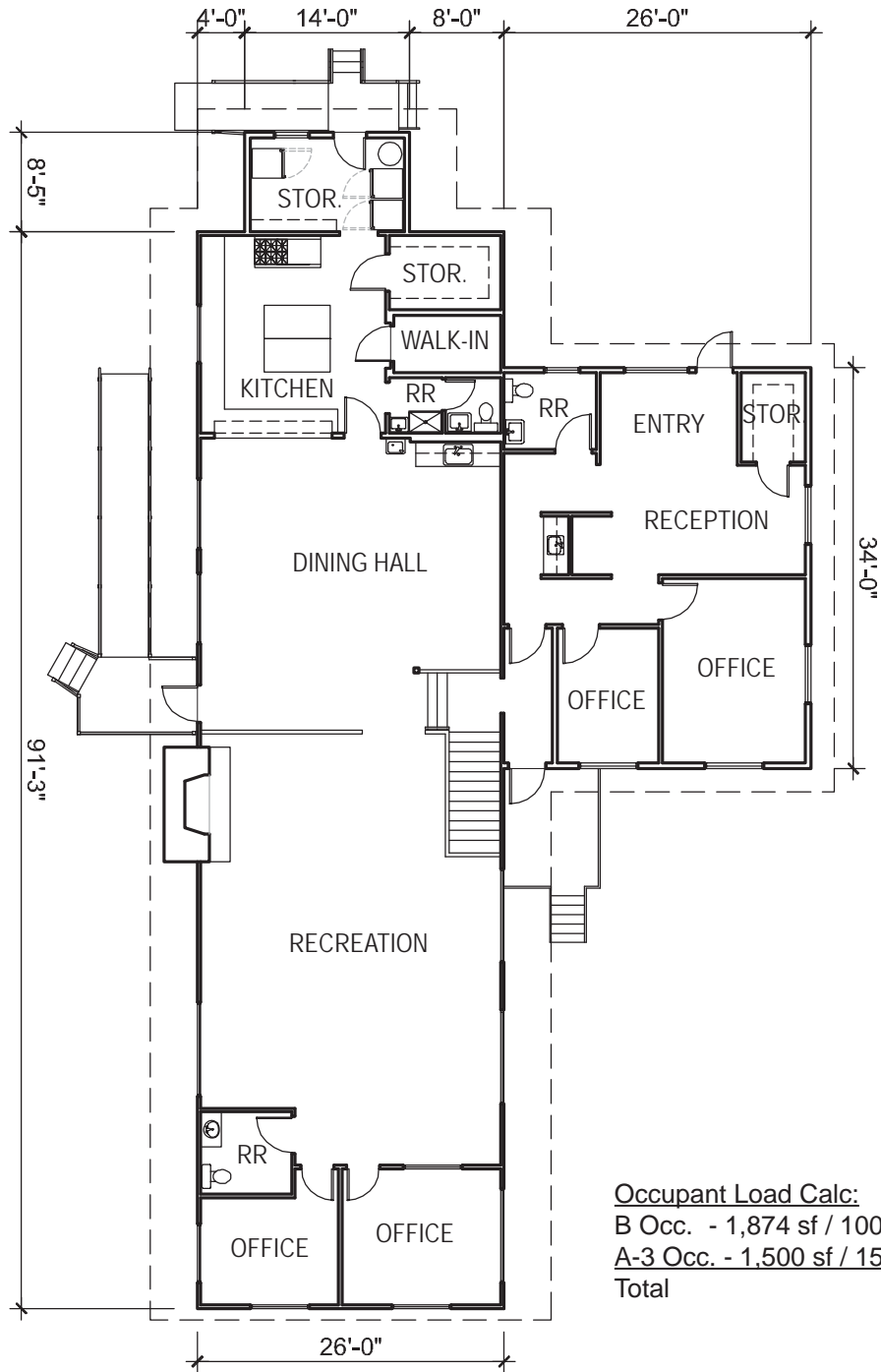


# Appendix

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| <u>Contents:</u>  | <u>Number of Pages:</u> |
|---|-------------------------|
| A. Existing Building Plans<br>Plans are based on provided documents and limited field measurements. | 7                       |
| B. Proposed Schematic Site Plan   | 1                       |
| C. Hazardous Materials Testing Report<br>LabCor, dated December 8th, 2009                           | 1                       |
| D-1. Structural Engineers - Existing Conditions Report<br>WDY, dated December 8th, 2009             | 14                      |
| D-2. Structural Engineers - Update to Existing Conditions Report<br>WDY, dated January 8, 2015      | 16                      |
| E-1. MEP Engineers - Existing Conditions Report<br>Interface Engineering, dated December 2nd, 2009  | 11                      |
| E-2. MEP Engineers - Code Update<br>Interface Engineering, dated January 14, 2015                   | 6                       |
| F-1. Civil Engineers - Existing Conditions Report<br>HHPR, dated January 7th, 2010                  | 18                      |





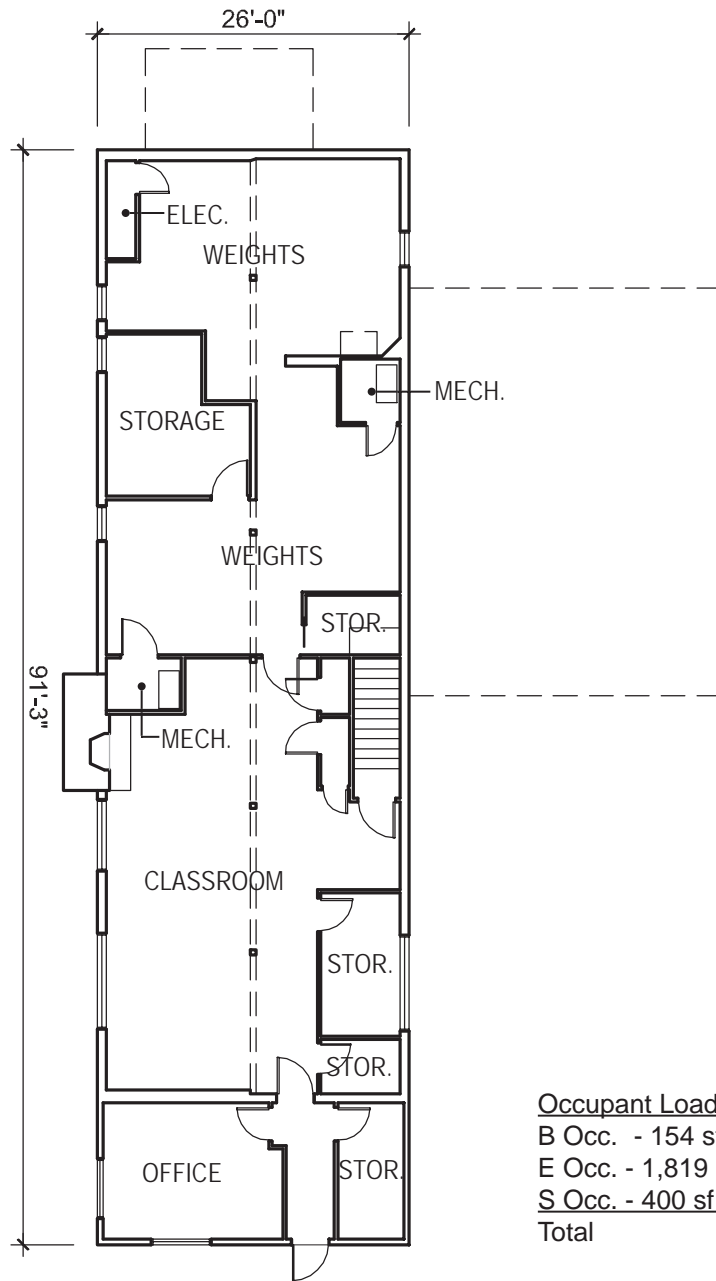
Occupant Load Calc:

|              |                         |                   |
|--------------|-------------------------|-------------------|
| B Occ.       | - 1,874 sf / 100 sf/occ | = 19 Occ.         |
| A-3 Occ.     | - 1,500 sf / 15 sf/occ  | = 100 Occ.        |
| <b>Total</b> |                         | <b>= 119 Occ.</b> |

Administration / Living  
Main Level

3,374 sf





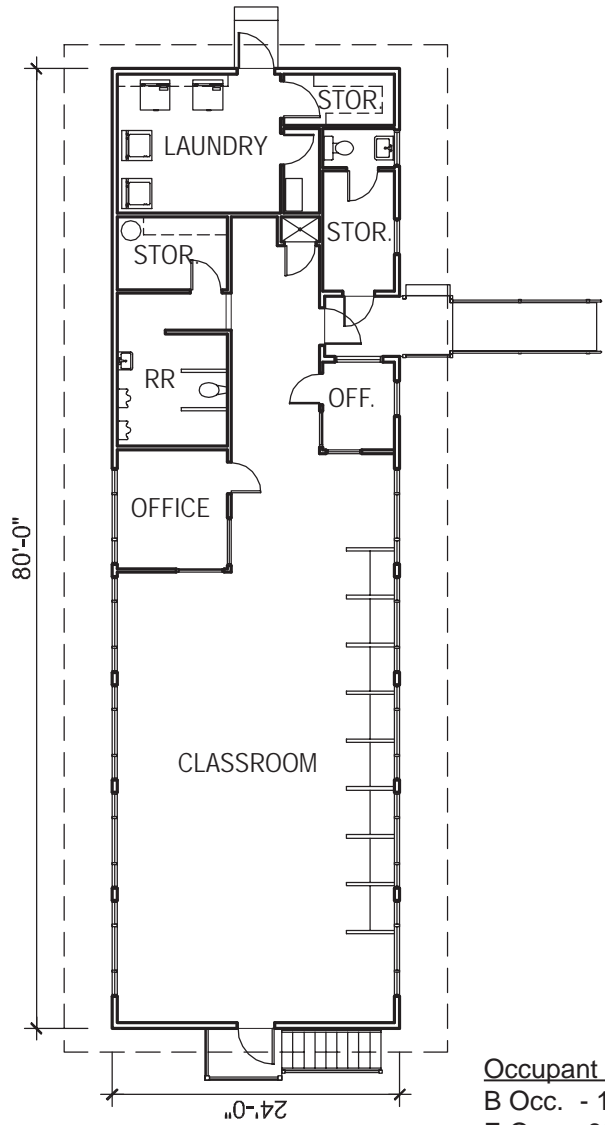
Occupant Load Calc:

|                               |                  |
|-------------------------------|------------------|
| B Occ. - 154 sf / 100 sf/occ  | = 2 Occ.         |
| E Occ. - 1,819 sf / 20 sf/occ | = 91 Occ.        |
| S Occ. - 400 sf / 300 sf/occ  | = 2 Occ.         |
| <b>Total</b>                  | <b>= 95 Occ.</b> |

Administration / Living  
Basement

2,373 sf





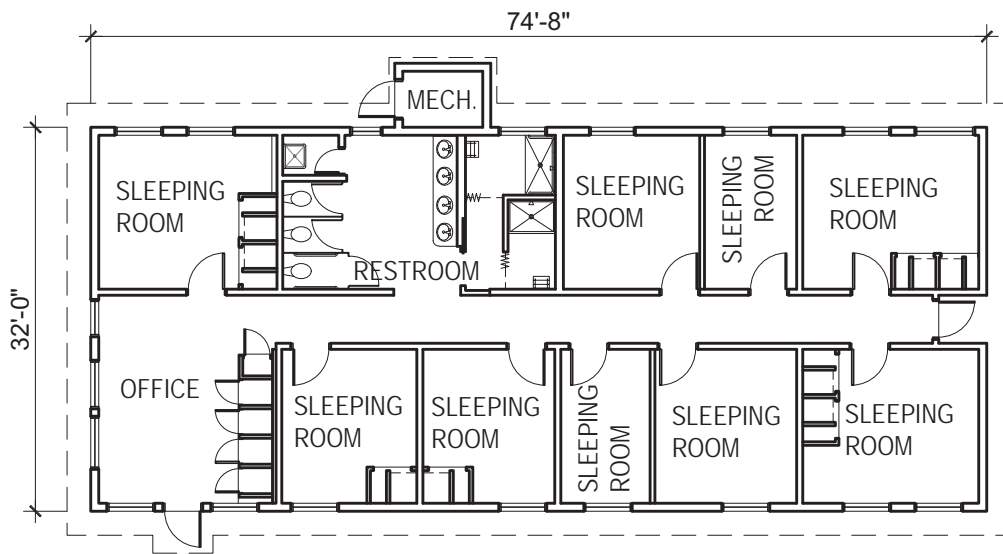
Occupant Load Calc:

|                              |                  |
|------------------------------|------------------|
| B Occ. - 180 sf / 100 sf/occ | = 2 Occ.         |
| E Occ. - 924 sf / 20 sf/occ  | = 46 Occ.        |
| S Occ. - 200 sf / 300 sf/occ | = 1 Occ.         |
| <b>Total</b>                 | <b>= 49 Occ.</b> |

School Building

1,889 sf





Occupant Load Calc:

I-1 Occ. - 2,416 sf / 120 sf/occ = 21 Occ.

Total = 21 Occ.

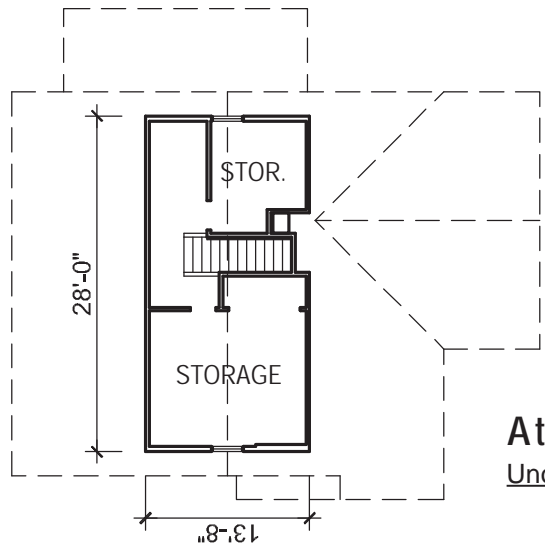
(Actual number of beds = 21 / 21 Occ.)

Residential Care Dorm

2,416 sf

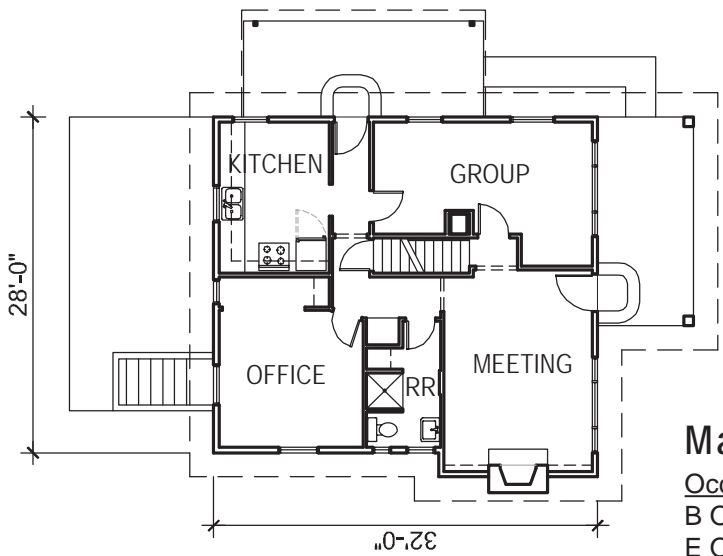






**Attic**  
Unoccupied

**310 sf**

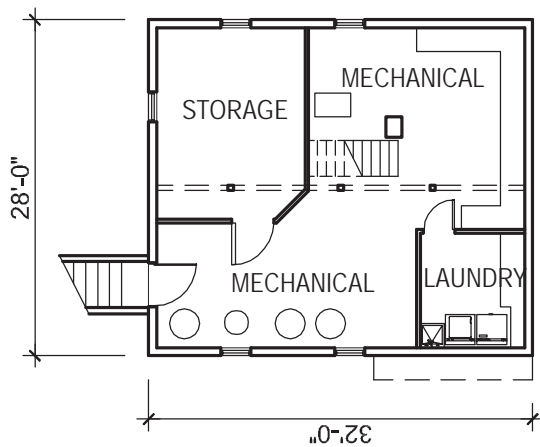


**Main Level**

**923 sf**

Occupant Load Calc:

|                              |                  |
|------------------------------|------------------|
| B Occ. - 168 sf / 100 sf/occ | = 2 Occ.         |
| E Occ. - 755 sf / 20 sf/occ  | = 38 Occ.        |
| <b>Total</b>                 | <b>= 40 Occ.</b> |

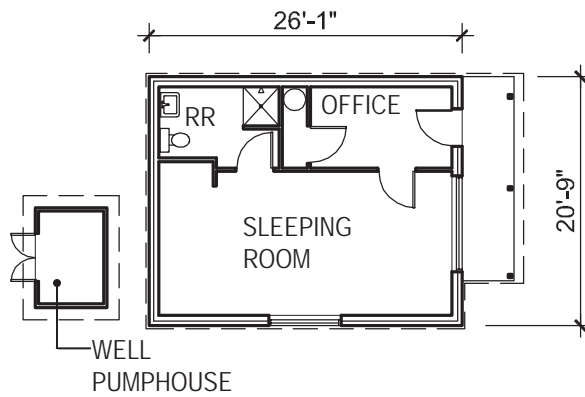


**Basement**  
Unoccupied

**896 sf**

**Farmhouse**





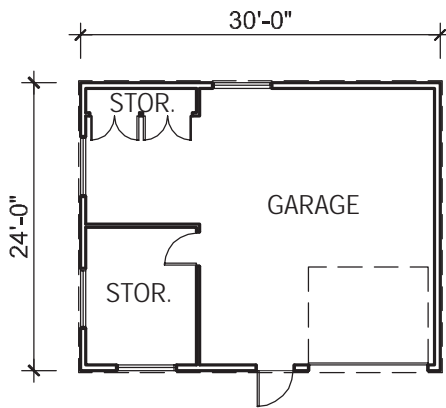
Occupant Load Calc:

|                                      |                  |
|--------------------------------------|------------------|
| B Occ. - 50 sf / 100 sf/occ          | = 1 Occ.         |
| R-2 Occ. - 491 sf / 50 sf/occ        | = 10 Occ.        |
| <b>Total</b>                         | <b>= 11 Occ.</b> |
| (Actual number of beds = 6 / 6 Occ.) |                  |

Shelter Care Dorm

541 sf





Occupant Load Calc:

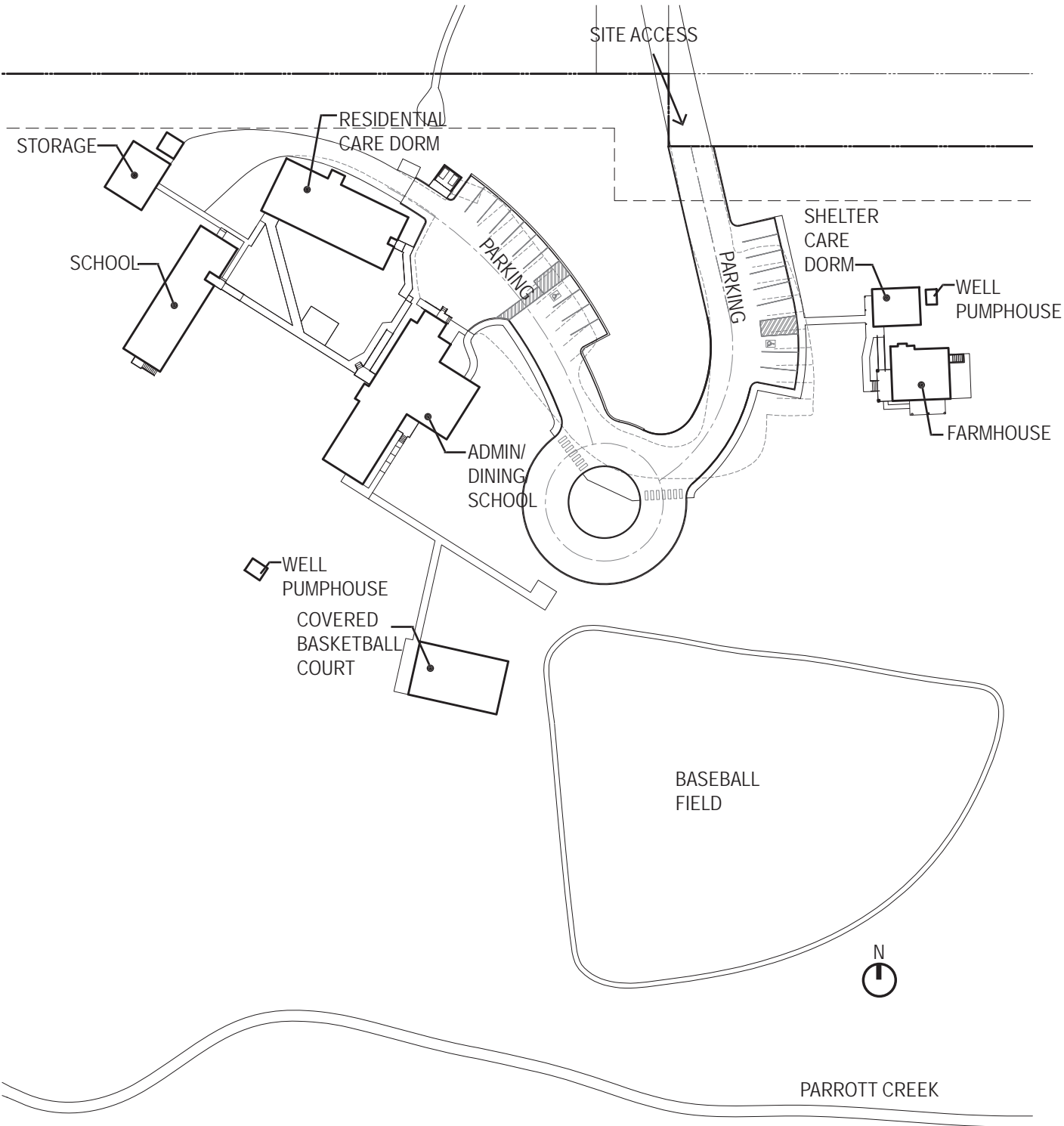
|                              |                 |
|------------------------------|-----------------|
| S Occ. - 720 sf / 300 sf/occ | = 3 Occ.        |
| <b>Total</b>                 | <b>= 3 Occ.</b> |

Storage Building

720 sf







Proposed Schematic Site Plan



*Asbestos and Environmental Analysis*

**Client:** Scott I Edwards Architecture  
 2525 E Burnside St  
 Portland, Or 97214

**Report Number:** 092270R01  
**Report Date:** 12/08/2009

P.O. No: n/a

**Job Number:** 092270  
**Project Name:** Unavailable at Login  
**Project Number:**  
**Project Notes:**

| <u>Client Sample ID:</u> 1                 |                           | <u>Sample ID:</u> S1 |                     |                        | <u>Date Analyzed:</u> 12/08/2009 |
|--|---------------------------|----------------------|---------------------|------------------------|----------------------------------|
| <u>Client Sample Description:</u>          |                           |                      |                     |                        | <u>Analyst:</u> Stephanie Golden |
| <u>Asbestos Mineral Fibers</u>             | <u>Percent of Sample:</u> | <u>Chrysotile</u>    | <u>Amosite</u>      | <u>Crocidolite</u>     | <u>Percent Asbestos:</u>         |
| <b>Layer 01</b>                            |                           |                      |                     |                        |                                  |
| fine compact powder w/<br>paint, white/tan | 40 %                      | 3 %                  | -                   | -                      | 3 %                              |
| <b>Layer 02</b>                            |                           |                      |                     |                        |                                  |
| compact chalky powder<br>w/ paper, white   | 60 %                      | -                    | -                   | -                      | NAD                              |
| <u>Other Fibers</u>                        | <u>Fibrous Glass</u>      | <u>Cellulose</u>     | <u>Mineral Wool</u> | <u>Synthetic Other</u> | <u>Matrix</u>                    |
| <b>Layer 01</b>                            | -                         | 4 %                  | -                   | -                      | 93 %                             |
| <b>Layer 02</b>                            | -                         | 3 %                  | -                   | -                      | 97 %                             |

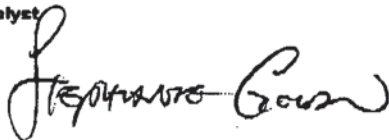
This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).  
 Testing method is per 40.CFR 763 Subpart F, Appendix A. PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected.  
 Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.  
 Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.  
 Asbestos detection interferences may result from material binders.  
 Qualitative and quantitative TEM analysis may be recommended for difficult samples.  
 Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.  
 The following estimate of error for this method by visual estimation of asbestos percent are as follows:  
 1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.  
 This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:

x 

Stephanie Golden  
 Analyst









**Structural • Civil Engineers**

December 8, 2009

scott | edwards architecture, LLP  
2525 East Burnside Street  
Portland, OR 97214

**Attn: Lisa McClellen****Re: Parrott Creek Ranch  
22518 S Parrot Creek Rd  
Oregon City, Oregon**

Dear Ms. McClellen:

**SCOPE**

At your request, WDY, Inc. visited the subject site on November 30, 2009. The purpose of our visit was to observe exposed to view structural systems and provide an opinion of the structural condition of the buildings. Our scope of work is only a brief cursory walk-through of the existing buildings to familiarize ourselves with the existing construction. Studies, material testing, destructive probing, and analysis of existing framing is beyond the scope of this report. Observation of all spaces was not performed. Our opinions are based on the exposed-to-view conditions observed during our cursory walk-through and our structural experience with similar structures constructed during similar periods. The campus consists of five primary buildings: A dining hall building, school, large dormitory, farmhouse, and small dorm. The site also includes a maintenance building and covered basketball court. A small metal shed and pump house also exist on the site, but are not part of this report.

This memo is not an ASCE-31 seismic evaluation and is not intended to, and will not, identify seismic deficiencies in the existing buildings.

**SUMMARY**

Based on our observations and our experience with similar structures, except as noted in our report below, the Parrott Creek Ranch campus structures appear to have successfully supported the gravity and lateral loads they have been subjected to in the past. With the exception of the large dormitory, the buildings are conventionally residential framed buildings. It is likely that none of the structures would comply with current seismic code requirements and parts of each structure would likely not meet current seismic design force level requirements. Decay was observed at the farmhouse entry and patio cover. Roof leaks were observed in the maintenance building and basketball court cover.

**BUILDING DESCRIPTIONS****A. Dining Hall**

The dining hall is a single story building with a daylight basement. The building houses a commercial kitchen, dining, recreation areas, and offices on the main floor level. A single story office addition is located to the east side of the building at approximately half a story below the main level. The office

addition is over a vented crawl space. The basement contains weight rooms, classroom, storage and offices. Access to the attic was provided through hatches in a southwest corner office, pantry near the north end of the building and in a hall in the office addition. Structural record drawings were not available for the dining hall.

#### Observations:

1. Construction is conventional residential wood framed construction. Roof framing over the dining hall and office addition is plywood sheathing over metal plate connected wood trusses. Floor framing was not exposed, but appeared to be 2x10 joists supported on a triple 2x12 center beam line. The beam line is supported on 6x6 posts at 12 feet on center. Basement posts are on raised concrete bases without exposed positive connection. Concrete basement walls step down from full height at the north end of the basement to at the basement floor at the south daylight end of the basement. The south 12 feet of the building is a two story addition with 2x roof framing. The east office addition floor framing is 2x decking supported on 4x6 beams at 4 feet on center.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatches do not show signs of roof leaks.
3. Exterior grade is sloped toward the east office addition and at several locations grade is even with the bottom of the crawl space vents. Moisture was noted on top of the crawl space vapor barrier. Near the office entry grade is less than 6 inches below the exterior siding. Similarly at the south two story addition, grade is against the exterior siding at several locations.
4. Exterior ramps have been constructed with tube steel columns, channels stringers, and angle edge members with PT wood spaced decking.
5. Basement walls and office stem walls observed do not exhibit cracking or signs differential settlement.
6. The masonry chimney is founded on a concrete exterior stem wall and CMU interior basement wall. The exterior adhered stone veneer does not have a lintel support or foundation ledge. A small vertical crack was noticed at the back of the basement firebox.

#### Conclusions:

1. The dining hall structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. However, in our opinion it is likely that the center beam beneath the dining hall and recreation room floor does not have adequate capacity to support current code loading criteria.
2. Due to the open floor plan of the main level of the dining hall/recreation area, it is likely that the lateral force resisting system in the east/west direction of the main level would not meet current code loading requirements.
3. Exterior grades at the office and south additions should be modified to allow site drainage away from the building and crawl space vents and provide a minimum 6 inches clearance between exterior grade and exterior siding.
4. Positive attachment of basement posts to foundations should be installed.
5. Fireplaces and chimney should be inspected and repaired as necessary by a qualified mason. Positive seismic anchorage may not be present between the chimney and the roof structure.



## B. School

The school building is a single story building over a vented crawl space. The building houses a single classroom, office and support spaces, and laundry room. Access to the attic was provided through an hatch in a north storage room off the laundry room. Access to the crawl space was provided through an exterior stem wall door at the south side of the building. Record drawings were not available for the school.

### Observations:

1. Construction is conventional residential wood framed construction. Roof framing is OSB sheathing over metal plate connected wood trusses. Floor framing is 2x decking supported on 4x6 beams at 4 feet on center supported on posts at 8 feet on center.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
3. Exterior grade slopes gradually down toward the south. Exterior grade is 6 inches or more below the exterior siding.
4. The crawl space has full height concrete stem walls. The crawl space is relatively level with a single grade change of approximately 2 to 3 feet within the crawl space. The grade change is approximately centered between floor posts, near center of the building. There is no vapor barrier in the crawl space. The crawl space appeared dry with only minor moisture noted in the south west corner (lowest elevation).
5. Crawl space posts are at least 6 inches above crawl space grade, but do not have positive attachment to foundations. Crawl space pad footings appear to be formed directly on the excavated grade without embedment.
6. Exterior ramps have been constructed with tube steel columns, channels stringers, and angle edge members and bracing with PT wood spaced decking.
7. Stem walls observed have several minor cracks at footing elevation changes, but do not exhibit signs differential settlement.

### Conclusions:

1. The school structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. In our opinion the floor framing is likely to have adequate capacity to support current code loading criteria.
2. Due to the open floor plan of the classroom and amount of wall openings, it is likely that the lateral force resisting system of the east wall would not meet current code loading requirements.
3. Stem wall cracking observed in the crawl space in our opinion is minor and likely due to concrete shrinkage and does not adversely affect the structure.
4. Positive attachment of basement posts to foundations should be installed.
5. Due to lack of crawl space interior footing embedment, post bases or footing should be positively connected together with struts.



### C. Large Dormitory

The large dormitory building is a single story building with slab on grade. The building houses seven bedrooms, restroom/shower facility and an open office. Access to the attic was provided through an hatch in the hallway near the center of the building. Undated record drawings were provided for the large dormitory building.

#### Observations:

1. Construction is reinforced CMU with nominal 6 inch interior and nominal 8 inch exterior walls founded on shallow turned down slab edge continuous concrete foundations. Roof framing is plywood sheathing over metal plate connected wood trusses. Record drawings indicate plywood on the bottom of the roof trusses.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
3. Interior and exterior CMU walls observed do not exhibit cracking or signs differential settlement.
4. A ceiling crack was noted near the center of the corridor.
5. Record drawings do not indicate code required wall to roof attachment for out-of-plane seismic forces.

#### Conclusions:

1. The large dormitory structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Exterior and interior CMU walls require addition of positive attachments between the tops of CMU walls and the roof system.
3. CMU wall reinforcement does not meet current code minimum reinforcement levels.

### D. Farmhouse

The existing residential farmhouse is a single story building over a full basement with a partially finished attic. The basement is unfinished, except that wallboard has been applied to the ceiling. Basement walls are board formed poured-in-place concrete. The unfinished portion of the west attic was accessible through an attic pony wall. A covered entry porch exists on the west side of the residence and a covered patio is to the south. Record drawings were not available for the farmhouse.

#### Observations:

1. Construction is conventional residential wood framed construction typical of the early to mid 20<sup>th</sup> century. Roof framing over is OSB sheathing over 2x4 framing at 24 inch spacing supported at the eaves and interior pony walls. Attic floor framing is 2x framing spanning north/south supported on a near central bearing wall. Main floor framing also spans north/south, supported on (3) 2x8 beams on 6x6 posts. The basement post and beams also support the bearing wall that supports the attic.



2. Basement posts do not have positive connections at the base or top. Basement posts are founded at the basement slab level and do not have stand-offs. Basement beams are pocketed into the basement walls. Exposed areas of the beams did not appear decayed.
3. Roof framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
4. Floor framing has noticeable permanent deflection between the kitchen and the dining room. Due to basement ceiling finishes it was not possible to determine the cause of the settlement, however a mechanical duct penetrates the floor framing in this area.
5. Exterior grade is 6 inches or more below the exterior siding.
6. Basement walls observed have several minor cracks and one approximately 1/4inches wide crack at the north wall. Main level floors and basement slab on grade do not exhibit signs of settlement at the crack locations.
7. The base of the entry porch posts are decayed and do not have positive base attachment. It appears that the posts bear directly on the entry slab on grade without foundations. The south post has obvious signs of settlement and the slab has cracked and tilted.
8. The base of the patio cover posts are decayed and do not have positive base attachment. It appears that the posts bear directly on the patio slab on grade. The slab on grade has been undermined by erosion at the post locations. The patio cover beam is a 4x4 and has notice permanent deflection. Edge 2x patio cover joists have obvious signs of decay.

Conclusions:

1. Except as noted between the kitchen and dining room, entry porch bases and the patio cover, the farmhouse structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. However, in our opinion it is likely that the center beam beneath the main floor and roof/ceiling framing does not have adequate capacity to support current code loading criteria.
2. Based on our experience with similar aged structures, it is likely that the exterior walls are not positively attached to the basement walls. It is likely that the lateral force resisting system would not meet current code requirements.
3. In our opinion basement wall cracking observed in the crawl space is likely due to concrete shrinkage and does not adversely affect the structure.
4. Basement posts should be raised off the basement floor and positive attachments installed at the tops and bottoms of the posts.
5. The deflected floor framing should be further investigated and necessary repairs made.
6. Entry porch posts should be replaced and founded on competent foundations.
7. In our opinion, the existing patio cover and patio cover support is substandard and should be removed and re-built to current code requirements.

## E. Small Dormitory

The small dormitory building is a single story building with slab on grade. The building houses a single bunk room, restroom and open office. There was no access to the attic space. Remodel record drawings dated 08/21/08 were available.



Observations:

1. Existing construction is covered by finish materials and not exposed to view. The building appears to be a converted garage. Remodel record drawings indicate that the roof framing is conventional low slope 2x framing supported on conventional wood framed walls. A covered entry exists along the west side of the structure.
2. Ceilings observed do not exhibit signs of distress or deflection or show signs of roof leaks.
3. Exterior grade is relatively flat around the building. Exterior grade is less than 6 inches below the exterior siding and in places against the siding.
4. Entry porch posts do not have positive attachments at top or bottom.
5. Remodel record drawings do not indicate improvements to the lateral force resisting system, such as wall to slab anchorage.

Conclusions:

1. The small dormitory structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Positive attachment of entry posts to foundations should be installed.
3. Existing grades should be reworked to slope away from the building and provide 6 inches minimum between grade and the bottom of siding materials.

## F. Maintenance Building

The maintenance building is a single story building with slab on grade. Attic access was provided through a hatch located near the center of the building. Record drawings were not available for the maintenance building.

Observations:

1. The building appears to be a pole type manufactured structure with double metal plate connected wood trusses at 8 feet on center supporting 2x4 joists. Wall framing was covered by finish materials.
2. Ceilings and roof framing observed exhibit signs of past and possibly current roof leaks in several areas.
3. Exterior grade is relatively flat around the building. Exterior grade is less than 6 inches below the exterior siding and in places against the siding.

Conclusions:

1. The maintenance building appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Roof leaks, if active should be repaired.
3. Existing grades should be reworked to slope away from the building and provide 6 inches minimum between grade and the bottom of siding materials.



## G. Basketball Court Cover

The basketball court cover is a single story open structure with slab on grade. Record drawings were not available for the basketball court cover.

### Observations:

1. The building appears to be a pole type manufactured structure with double metal plate connected wood trusses at 10 feet on center supporting 2x4 joists. Posts supporting the double trusses are pressure treated 6x8's with approximately 17 feet to the bottom of the roof trusses.
2. Several holes in the metal roofing were observed.
3. Exterior grade is relatively flat around the building.

### Conclusions:

1. The basketball cover appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Holes in roofing should be repaired.

## LIMITATIONS

This letter is intended to identify possible structural conditions within the scope that may be deficient. This report is based on our site observation of exposed-to-view structural members. Snow, earthquake or wind loadings may exceed the capacity of the existing structural systems and life/safety or building damage risk during such an event may be possible.

This letter is not a design for mitigating noted hazards. WDY, Inc. provides no warranty or guarantee either expressed or implied other than our work is performed with the usual thoroughness and competence of the engineering profession providing similar services at the time services are performed. This letter is an instrument of service and shall not be copied or distributed to others without the written authorization of WDY, Inc.

Sincerely,

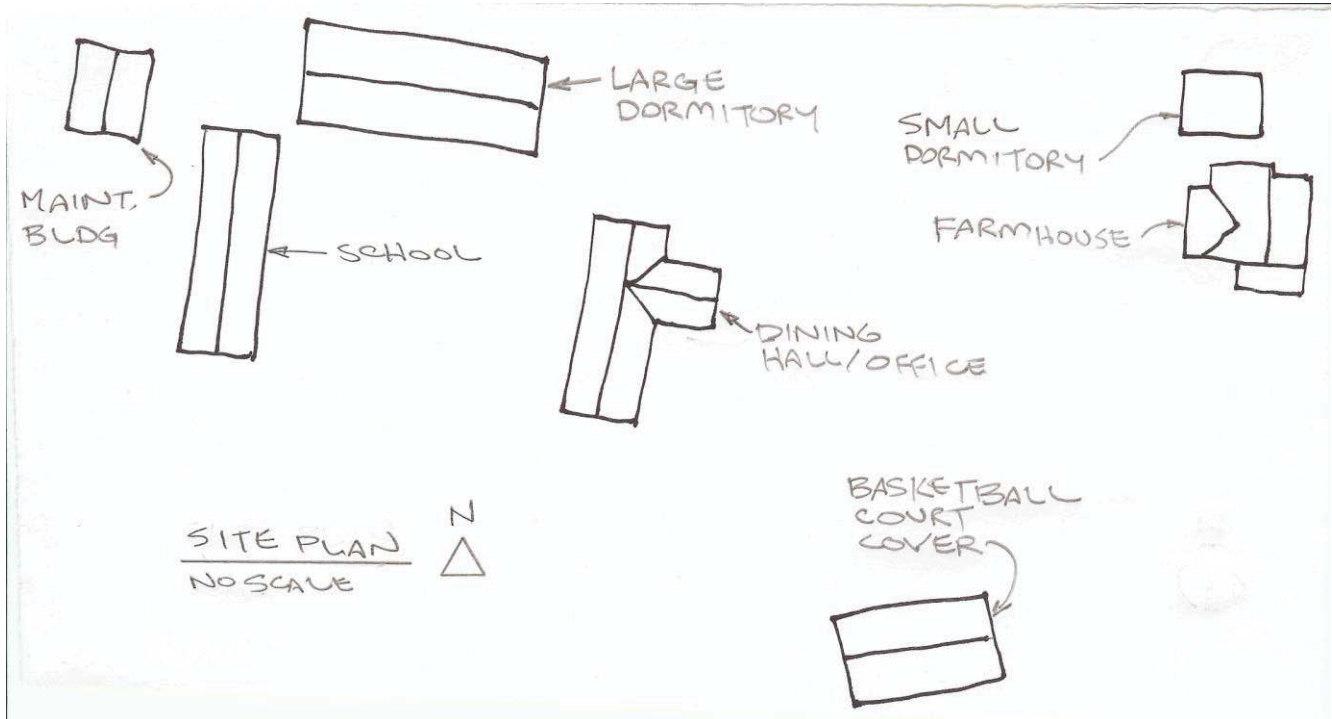
WDY, Inc.

Dale DiLoreto, P.E., S.E.

P:\2009\09183 Parrott Creek Master Plan\Document\09183\_memo\_2009-12-08.doc



## APPENDIX



### Dining Hall



West Elevation



South addition







East Elevation



Grade at crawl space vent



Basement post base



Basement post top



Chimney veneer



School



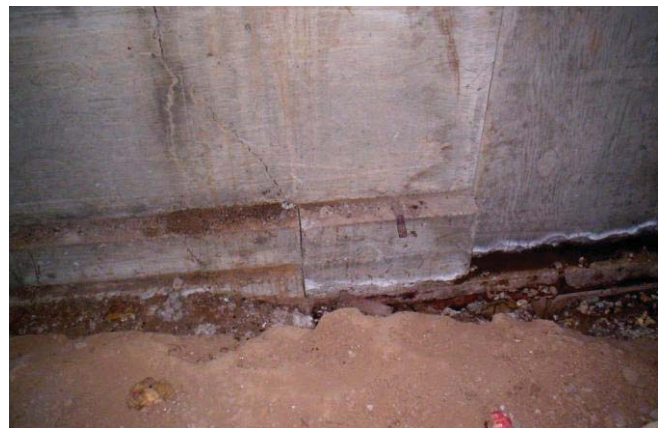
East Elevation



Crawl space



Stem wall crack



**Large Dormitory**



North/east elevation



West Elevation



Ceiling crack



Attic mechanical platform

**Farmhouse**



West/South Elevation



South/East Elevation with patio cover



Patio beam and decayed fascia



Settlement at entry porch and decayed post base



Basement north wall crack



Basement post base



### Small Dormitory



North/West Elevation with Farmhouse



Soil against siding



Entry Canopy Framing

### Maintenance Building



South Elevation grade at siding



Roof leak damage



**Basketball Court Cover**



North/East Elevation



Post base



Cover framing





Structural • Civil Engineers

November 30, 2009  
Update January 15, 2015

scott | edwards architecture, LLP  
 2525 East Burnside Street  
 Portland, OR 97214

**Attn: Jason Wesolowski**

**Re: Parrott Creek Ranch**  
**Update to November 30, 2009 Conditions Report**  
**22518 S Parrot Creek Rd**  
**Oregon City, Oregon**

Dear Mr. Wesolowski:

## SCOPE

At your request, WDY, Inc. visited the subject site on December 18, 2014. The purpose of our visit was to briefly walk the site for obvious conditional changes since our previous campus walk-through on November 30, 2009. Crawl spaces and attics were not observed during our 2014 site visit. The purpose of our 2009 visit was to observe exposed to view structural systems and provide an opinion of the structural condition of the buildings. Our scope of work is only a brief cursory walk-through of the existing buildings to familiarize ourselves with the existing construction. Studies, material testing, destructive probing, and analysis of existing framing is beyond the scope of this report. Observation of all spaces was not performed. Our opinions are based on the exposed-to-view conditions observed during our cursory walk-throughs and our structural experience with similar structures constructed during similar periods. The campus consists of five primary buildings: A dining hall building, school, large dormitory, farmhouse, and small dorm. The site also includes a maintenance building and covered basketball court. A small metal shed and pump house also exist on the site, but are not part of this report. Changes in condition since our 2009 site visit are underlined and in italics.

This memo is not an ASCE-31 seismic evaluation and is not intended to, and will not, identify seismic deficiencies in the existing buildings.

## SUMMARY

Based on our observations and our experience with similar structures, except as noted in our report below, the Parrott Creek Ranch campus structures appear to have successfully supported the gravity and lateral loads they have been subjected to in the past. With the exception of the large dormitory, the buildings are conventionally residential framed buildings. It is likely that none of the structures would comply with current seismic code requirements and parts of each structure would likely not meet current seismic design force level requirements. Decay was observed at the farmhouse entry and patio cover and the small dormitory entry roof. Roof leaks were observed in the maintenance building and basketball court cover. With the exception of reconstruction of the farmhouse patio cover, other items noted in our November 30, 2009 report do not appear to have been addressed.

## BUILDING DESCRIPTIONS

### A. Dining Hall

The dining hall is a single story building with a daylight basement. The building houses a commercial kitchen, dining, recreation areas, and offices on the main floor level. A single story office addition is located to the east side of the building at approximately half a story below the main level. The office addition is over a vented crawl space. The basement contains weight rooms, classroom, storage and offices. Access to the attic was provided through hatches in a southwest corner office, pantry near the north end of the building and in a hall in the office addition. Structural record drawings were not available for the dining hall.

#### Observations:

1. Construction is conventional residential wood framed construction. Roof framing over the dining hall and office addition is plywood sheathing over metal plate connected wood trusses. Floor framing was not exposed, but appeared to be 2x10 joists supported on a triple 2x12 center beam line. The beam line is supported on 6x6 posts at 12 feet on center. Basement posts are on raised concrete bases without exposed positive connection. Concrete basement walls step down from full height at the north end of the basement to at the basement floor at the south daylight end of the basement. The south 12 feet of the building is a two story addition with 2x roof framing. The east office addition floor framing is 2x decking supported on 4x6 beams at 4 feet on center.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatches do not show signs of roof leaks.
3. Exterior grade is sloped toward the east office addition and at several locations grade is even with the bottom of the crawl space vents. Moisture was noted on top of the crawl space vapor barrier. Near the office entry grade is less than 6 inches below the exterior siding. Similarly at the south two story addition, grade is against the exterior siding at several locations.
4. Exterior ramps have been constructed with tube steel columns, channels stringers, and angle edge members with PT wood spaced decking.
5. Basement walls and office stem walls observed do not exhibit cracking or signs differential settlement. *It was reported that basement leaking occasionally occurs at the northwest corner.*
6. The masonry chimney is founded on a concrete exterior stem wall and CMU interior basement wall. The exterior adhered stone veneer does not have a lintel support or foundation ledge. A small vertical crack was noticed at the back of the basement firebox.
7. *A ceiling and wall gypsum wallboard crack were noted in the dining room at the north side of the door from the dining room to the east office.*

#### Conclusions:

1. The dining hall structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. However, in our opinion it is likely that the center beam beneath the dining hall and recreation room floor does not have adequate capacity to support current code loading criteria.





2. Due to the open floor plan of the main level of the dining hall/recreation area, it is likely that the lateral force resisting system in the east/west direction of the main level would not meet current code loading requirements.
3. Exterior grades at the office and south additions should be modified to allow site drainage away from the building and crawl space vents and provide a minimum 6 inches clearance between exterior grade and exterior siding.
4. Positive attachment of basement posts to foundations should be installed.
5. Fireplaces and chimney should be inspected and repaired as necessary by a qualified mason. Positive seismic anchorage may not be present between the chimney and the roof structure.
6. Gypsum wallboard cracks in the dining room may be due to minor differential settlement or differential roof framing deflection due to additional roof loading from the east office over-framing on the dining room roof. Additional review is necessary to determine if the cracking is a structural issue.

## B. School

The school building is a single story building over a vented crawl space. The building houses a single classroom, office and support spaces, and laundry room. Access to the attic was provided through a hatch in a north storage room off the laundry room. Access to the crawl space was provided through an exterior stem wall door at the south side of the building. Record drawings were not available for the school.

### Observations:

1. Construction is conventional residential wood framed construction. Roof framing is OSB sheathing over metal plate connected wood trusses. Floor framing is 2x decking supported on 4x6 beams at 4 feet on center supported on posts at 8 feet on center.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
3. Exterior grade slopes gradually down toward the south. Exterior grade is 6 inches or more below the exterior siding.
4. The crawl space has full height concrete stem walls. The crawl space is relatively level with a single grade change of approximately 2 to 3 feet within the crawl space. The grade change is approximately centered between floor posts, near center of the building. There is no vapor barrier in the crawl space. The crawl space appeared dry with only minor moisture noted in the south west corner (lowest elevation).
5. Crawl space posts are at least 6 inches above crawl space grade, but do not have positive attachment to foundations. Crawl space pad footings appear to be formed directly on the excavated grade without embedment.
6. Exterior ramps have been constructed with tube steel columns, channels stringers, and angle edge members and bracing with PT wood spaced decking.
7. Stem walls observed have several minor cracks at footing elevation changes, but do not exhibit signs differential settlement.



Conclusions:

1. The school structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. In our opinion the floor framing is likely to have adequate capacity to support current code loading criteria.
2. Due to the open floor plan of the classroom and amount of wall openings, it is likely that the lateral force resisting system of the east wall would not meet current code loading requirements.
3. Stem wall cracking observed in the crawl space in our opinion is minor and likely due to concrete shrinkage and does not adversely affect the structure.
4. Positive attachment of crawl space posts to foundations should be installed.
5. Due to lack of crawl space interior footing embedment, post bases or footing should be positively connected together with struts.

### C. Large Dormitory

The large dormitory building is a single story building with slab on grade. The building houses nine bedrooms, restroom/shower facility and an open office. Access to the attic was provided through a hatch in the hallway near the center of the building. Undated record drawings were provided for the large dormitory building.

Observations:

1. Construction is reinforced CMU with nominal 6 inch interior and nominal 8 inch exterior walls founded on shallow turned down slab edge continuous concrete foundations. Roof framing is plywood sheathing over metal plate connected wood trusses. Record drawings indicate plywood on the bottom of the roof trusses.
2. Roof and floor framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
3. Interior and exterior CMU walls observed do not exhibit cracking or signs differential settlement.
4. A ceiling crack was noted near the center of the corridor.
5. Record drawings do not indicate code required wall to roof attachment for out-of-plane seismic forces.

Conclusions:

1. The large dormitory structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Exterior and interior CMU walls require addition of positive attachments between the tops of CMU walls and the roof system.
3. CMU wall reinforcement does not meet current code minimum reinforcement levels. However, reinforcing noted on record drawings will likely have adequate strength to resist current code prescribed forces and meet existing building criteria set in ASCE-41.



## D. Farmhouse

The existing residential farmhouse is a single story building over a full basement with a partially finished attic. The basement is unfinished, except that wallboard has been applied to the ceiling. Basement walls are board formed poured-in-place concrete. The unfinished portion of the west attic was accessible through an attic pony wall. A covered entry porch exists on the west side of the residence and a covered patio is to the south. Record drawings were not available for the farmhouse.

### Observations:

1. Construction is conventional residential wood framed construction typical of the early to mid 20<sup>th</sup> century. Roof framing is OSB sheathing over 2x4 framing at 24 inch spacing supported at the eaves and interior pony walls. Attic floor framing is 2x framing spanning north/south supported on a near central bearing wall. Main floor framing also spans north/south, supported on (3) 2x8 beams on 6x6 posts. The basement post and beams also support the bearing wall that supports the attic.
2. Basement posts do not have positive connections at the base or top. Basement posts are founded at the basement slab level and do not have stand-offs. Basement beams are pocketed into the basement walls. Exposed areas of the beams did not appear decayed.
3. Roof framing observed does not exhibit signs of distress or deflection. Roof locations observed from the access hatch do not show signs of roof leaks.
4. Floor framing has noticeable permanent deflection between the kitchen and the dining room. Due to basement ceiling finishes it was not possible to determine the cause of the settlement, however a mechanical duct penetrates the floor framing in this area.
5. Exterior grade is 6 inches or more below the exterior siding.
6. Basement walls observed have several minor cracks and one approximately 1/4 inch wide crack at the north wall. Main level floors and basement slab on grade do not exhibit signs of settlement at the crack locations.
7. The base of the entry porch posts are decayed and do not have positive base attachment. It appears that the posts bear directly on the entry slab on grade without foundations. The south post has obvious signs of settlement and the slab has cracked and tilted.
8. ~~The base of the patio cover posts are decayed and do not have positive base attachment. It appears that the posts bear directly on the patio slab on grade. The slab on grade has been undermined by erosion at the post locations. The patio cover beam is a 4x4 and has notice permanent deflection. Edge 2x patio cover joists have obvious signs of decay.~~ The patio cover has been replaced with new construction. Posts have manufactured light gauge post bases connected to the slab on grade and knee braces to the beam above. Grade has been brought up to the slab

### Conclusions:

1. Except as noted between the kitchen and dining room, and entry porch bases ~~and the patio cover~~, the farmhouse structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years. However, in our opinion it is likely that the center beam beneath the main floor and roof/ceiling framing does not have adequate capacity to support current code loading criteria.



2. Based on our experience with similar aged structures, it is likely that the exterior walls are not positively attached to the basement walls. It is likely that the lateral force resisting system would not meet current code requirements.
3. In our opinion basement wall cracking observed in the crawl space is likely due to concrete shrinkage and does not adversely affect the structure.
4. Basement posts should be raised off the basement floor and positive attachments installed at the tops and bottoms of the posts.
5. The deflected floor framing should be further investigated and necessary repairs made.
6. Entry porch posts should be replaced and founded on competent foundations.
- ~~7. In our opinion, the existing patio cover and patio cover support is substandard and should be removed and re-built to current code requirements.~~

## E. Small Dormitory

The small dormitory building is a single story building with slab on grade. The building houses a single bunk room, restroom and open office. There was no access to the attic space. Remodel record drawings dated 08/21/08 were available.

### Observations:

1. Existing construction is covered by finish materials and not exposed to view. The building appears to be a converted garage. Remodel record drawings indicate that the roof framing is conventional low slope 2x framing supported on conventional wood framed walls. A covered entry exists along the west side of the structure.
2. Ceilings observed do not exhibit signs of distress or deflection or show signs of roof leaks.
3. Exterior grade is relatively flat around the building. Exterior grade is less than 6 inches below the exterior siding and in places against the siding.
4. Entry porch posts do not have positive attachments at top or bottom. Decay was noted at the ends of the porch beams and edge 2x porch rafters. The porch beam was double notched at the interior support.
5. Remodel record drawings do not indicate improvements to the lateral force resisting system, such as wall to slab anchorage.

### Conclusions:

1. The small dormitory structure appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Positive attachment of entry posts to foundations should be installed.
3. Existing grades should be reworked to slope away from the building and provide 6 inches minimum between grade and the bottom of siding materials.
4. The porch beam should be replaced with positive connections to posts. Decayed edge porch rafters should be replaced.



## F. Maintenance Building

The maintenance building is a single story building with slab on grade. Attic access was provided through a hatch located near the center of the building. Record drawings were not available for the maintenance building.

### Observations:

1. The building appears to be a pole type manufactured structure with double metal plate connected wood trusses at 8 feet on center supporting 2x4 joists. Wall framing was covered by finish materials.
2. Ceilings and roof framing observed exhibit signs of past and possibly current roof leaks in several areas. Roof leaks observed in 2009 appear to continue to leak. Ceiling damage has increased since 2009.
3. Exterior grade is relatively flat around the building. Exterior grade is less than 6 inches below the exterior siding and in places against the siding.
4. The northwest corner of the slab has crack approximately 5 feet from the corner and the corner of the building has settled.

### Conclusions:

1. With the exception of the northwest corner of the building, the maintenance building appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Roof leaks, if active should be repaired.
3. Existing grades should be reworked to slope away from the building and provide 6 inches minimum between grade and the bottom of siding materials.
4. Foundation repairs should be made at the northwest corner of the building to mitigate settlement.

## G. Basketball Court Cover

The basketball court cover is a single story open structure with slab on grade. Record drawings were not available for the basketball court cover.

### Observations:

1. The building appears to be a pole type manufactured structure with double metal plate connected wood trusses at 10 feet on center supporting 2x4 joists. Posts supporting the double trusses are pressure treated 6x8's with approximately 17 feet to the bottom of the roof trusses.
2. Several holes in the metal roofing were observed.
3. Exterior grade is relatively flat around the building.



Conclusions:

1. The basketball cover appears to have successfully supported the gravity and lateral loads it has been subjected to over the years.
2. Holes in roofing should be repaired.

**LIMITATIONS**

This letter is intended to identify possible structural conditions within the scope that may be deficient. This report is based on our site observation of exposed-to-view structural members. Snow, earthquake or wind loadings may exceed the capacity of the existing structural systems and life/safety or building damage risk during such an event may be possible.

This letter is not a design for mitigating noted hazards. WDY, Inc. provides no warranty or guarantee either expressed or implied other than our work is performed with the usual thoroughness and competence of the engineering profession providing similar services at the time services are performed. This letter is an instrument of service and shall not be copied or distributed to others without the written authorization of WDY, Inc.

Sincerely,

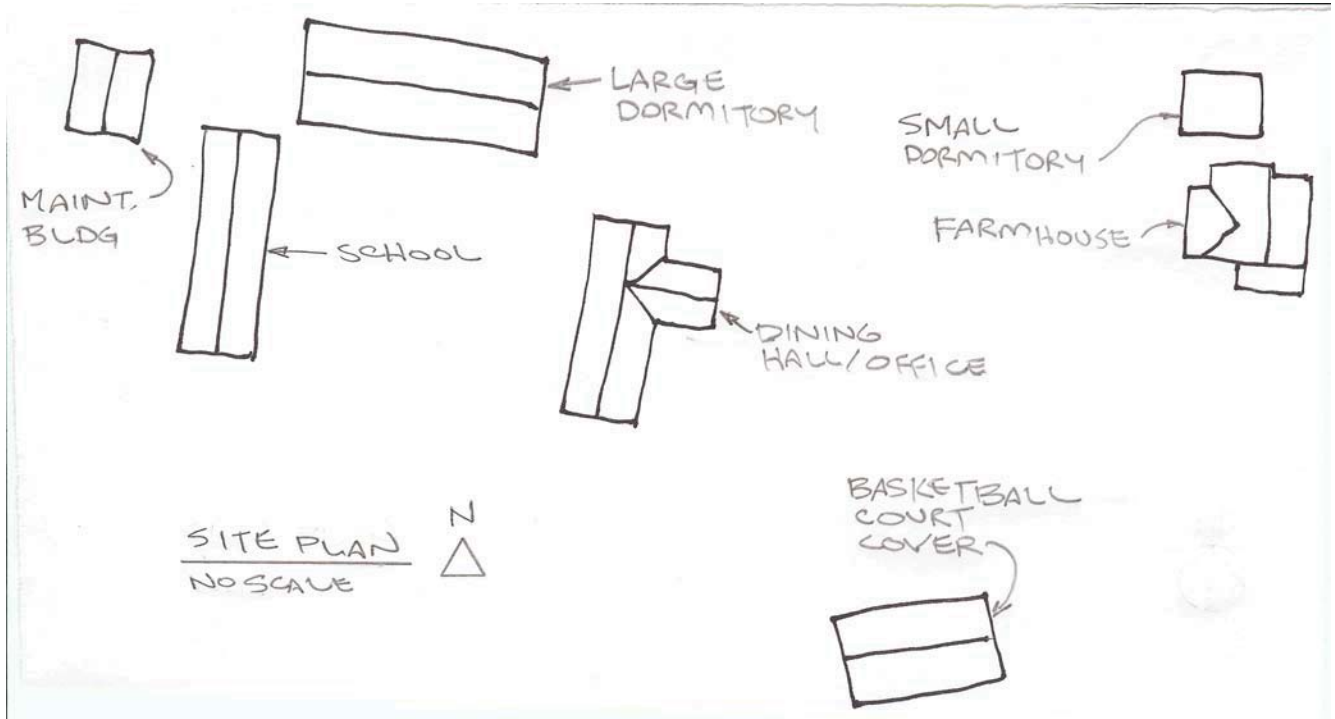
WDY, Inc.

Dale DiLoreto, P.E., S.E.

P:\2014\14227 Parrott Creek Update\Document\14227\_memo\_2014-01-15.doc



## APPENDIX



### Dining Hall



West Elevation



South addition





East Elevation



Grade at crawl space vent



Basement post base



Basement post top



Chimney veneer





School



East Elevation



Crawl space



Stem wall crack



**Large Dormitory**



North/east elevation



West Elevation



Ceiling crack



Attic mechanical platform



**Farmhouse**



West/South Elevation



South/East Elevation with previous patio cover



New patio cover



Settlement at entry porch and decayed post base



Basement north wall crack



Basement post base



**Small Dormitory**



North/West Elevation with Farmhouse



Soil against siding



Entry Canopy Framing



Entry beam decay



**Maintenance Building**



South Elevation grade at siding



Roof leak damage (2009)



Roof leak damage (2014)



Roof leak damage (2014)



**Basketball Court Cover**



North/East Elevation



Post base



Cover framing



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PORTLAND  
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 ABU DHABI

Lisa McClellan  
 Scott/Edwards Architecture  
 2525 E. Burnside  
 Portland, OR 97214

December 2, 2009

Re: Parrott Creek Ranch Due Diligence  
 2009-0661

The following is an assessment of existing electrical, mechanical, and plumbing systems in the main buildings of the Parrott Creek Ranch (i.e. Dining Hall, Dorm, Small Dorm, School, House). Information was obtained in a walkthrough of the site on 11/30/09, along with drawings received from your office.

### **ELECTRICAL:**

#### **Dining Hall:**

- The main electrical panel and sub branch panel located in the lower electrical room are installed without the working clearances as required per the Oregon Electrical Specialty Code (OESC) 110.26(A)(1). The physical depth of the electrical room is not wide enough to provide sufficient working space as required by code. Fulfillment of this requirement may necessitate relocation of electrical panels/equipment. It is typically more cost effective to move electrical equipment to produce the required clearances as opposed to reconfiguring a structural wall.
- The building electrical service is 120/240V, 200A, single phase. The main distribution panel is loaded to capacity. Adds or changes to the building that significantly increase the electrical demand on the system would require upgrading the electrical service to a higher ampacity.
- The kitchen does not appear to be fed with adequate branch circuits to serve existing kitchen appliances. On site faculty reported nuisance tripping of electrical breakers occurs when multiple appliances are operating simultaneously.
- Interior lighting fixtures are in poor condition. The majority of luminaires are supplied with T12 fluorescent lamps. Due to new state ordinances restricting the use of this lamp type, T12 lamps will be in increasingly short supply. Furthermore, magnetic ballasts are used for fluorescent light fixtures. Several are generating an audible humming sound and are in need of replacement. Existing luminaires can be upgraded with new energy efficient lamps/ballasts, or replaced with new fixtures depending on the application. Vandal resistant luminaires are available, and should be a consideration in applicable locations.

Mechanical and Electrical Engineering  
 Building Technologies  
 Commissioning  
 Energy Consulting  
 Fire/Life Safety  
 Lighting Design  
 Sustainable Design

- Surface mounted raceways for fire alarm cabling is not supported properly at several locations. There are also areas of separation along the raceway which may compromise the fire alarm cables and expose cabling to damage/vandalism.



- A number of receptacles and cover plates are damaged or missing, have been coated with textured wallcovering, or are lacking GFCI protection as required per OESC.



Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. Product information is included in the appendix.

- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with Oregon Structural Specialty Code (OSSC) section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length



fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.

- Existing exit signs are not in compliance with OSSC section 1011. This section requires that “Exit signs shall be illuminated at all times... [and] not less the 90 minutes in case of primary power loss” Fulfillment of this requirement will necessitate the replacement of non illuminated exit signs and batter back-up power sources for several internally illuminated exit signs.

#### **Dorm:**

- The main electrical panel and sub branch panel located in the fire riser room are installed without the working clearances as required per the OESC 110.26(A)(1). Water piping is installed within the working clearance. Fulfillment of the OESC requirement may necessitate relocation of either objects located within the required clear areas or relocation of electrical panels/equipment. Except for a structural wall, it is typically more cost effective to move the objects located within the required clearance.
- The building electrical service is 120/240V, 200A, single phase.
- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with OSSC section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.
- Existing exit signs are not in compliance with OSSC section 1011. This section requires that “Exit signs shall be illuminated at all times... [and] not less the 90 minutes in case of primary power loss” Fulfillment of this requirement will necessitate the replacement of non illuminated exit signs and batter back-up power sources for several internally illuminated exit signs.
- Fire alarm manual pull stations located at exterior egress doors are installed at approximately 55” AFF. Per ADA requirements the maximum height to the top of handle is 48” AFF.
- Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. However, tamper resistant receptacles are not a code required for this occupancy. Product information is included in the appendix.

**Small Dorm:**

- The small dorm is a relatively new building, and appears to comply with current codes.
- The building electrical service is 120/240V, single phase.
- Battery backup lighting units (bug-eyes) are used to provide the required illumination along the path of egress. Self-illuminated exit signs are used to mark the egress exits in compliance with OSSC section 1011.
- Tamper resistant receptacle are used in the dwelling unit.
- GFCI receptacles are used in locations where required per the OESC.
- The electrical equipment is in good working condition.

**School:**

- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with OSSC section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.
- Fire alarm manual pull stations located at exterior egress doors are installed at approximately 55” AFF. Per ADA requirements the maximum height to the top of handle is 48” AFF.
- Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. However, tamper resistant receptacles are not a code required for this occupancy.
- Interior lighting fixtures are in fair condition and performing reasonably well. The majority of luminaires are supplied with T12 fluorescent lamps. Due to new state ordinances restricting the use of this lamp type, T12 lamps will be in increasingly short supply. Existing luminaires can be upgraded with new energy efficient lamps/ballasts, or replaced with new fixtures depending on the application. Vandal resistant luminaires are available, and should be a consideration in applicable locations.

**House:**

- This building is a three level house with an electrical installation typical of a single family residence built at the time of original construction.
- The house electrical service is 120/240V, single phase.

- Electrical receptacles have not been installed in general locations per OESC 210. Extension cords and power strips are currently utilized to compensate for the need of additional convenience receptacles.
- Several NEMA 1-15R receptacle outlets are installed. This is a typical configuration used at the time of the building's original construction. However, this configuration lacks an equipment grounding conductor. Equipment grounding conductors help protect personnel from accidental electric shock caused by a ground fault. Receptacles with equipment grounding (e.g. NEMA 5-15R) are required per OESC 250.114.
- Tamper resistant receptacles are not installed per current OESC requirements, Oregon amendments section 406.11.
- GFCI outlets are not installed per OESC 210.8.
- Arc-fault circuit interrupters are not installed at outlet locations as required per current OESC requirements, Oregon amendments section 210.12.

### **MECHANICAL / PLUMBING:**

#### **Dining Hall:**

- The Dining Hall is served primarily by two split system fan coil units with oil heat. One unit appears to only serve the basement and another unit appears to only serve the main level. The fan coils and outdoor condensing units (on the roof) appear to be near the end of their design life and are recommended to be replaced in the near future. These units could be replaced with split system heat pumps, which would eliminate the need for oil heat and also provide greater efficiency.
- No means for introducing outside ventilation air were observed. It is recommended that when the split system fan coils are replaced, a small heat recovery ventilator be installed on each new fan system to introduce ventilation air into the space. This will improve indoor air quality greatly.
- There are a couple of through the wall AC units and space heaters installed, indicating that certain zones get hot and some get cold. It is recommended that the building loads and zoning be analyzed and followed up with a system air re-balancing and possible re-zoning.
- The kitchen is commercial in nature and has a Type-I (range) hood and Type-II (dishwasher) hood. The kitchen appears to have been recently updated and in reasonable working condition. It is recommended that the exhaust fans be functionally tested and re-balanced. Also, it is recommended that the grease duct be cleaned.
- Despite the fact that there are two rooftop exhaust fans for the kitchen hoods, there is no make-up air unit installed. It is recommended that a small make-up air unit for the kitchen be installed. This will improve negative building pressurization issues which were

observed during the site visit (outdoor air was observed being drawn into the building at several cracks).

- The fixtures in the bathrooms are very old and should be updated to ADA compliant low flow fixtures in the future.
- The South end of the building is served by a small electric water heater located in the attic. This water heater appears to be in working condition.
- The north side of the building is served by a 50 gallon propane water heater (Rheem 21V50 / 60 MBH input). This water heater appears to be relatively new and in working order.

**Dorm:**

- The dorm is served by a single fan coil unit located in the attic. Cooling is by an outdoor condensing unit on grade. Heating is provided by a hot water coil, circulation pump, and instantaneous propane water heater located in the mechanical room. The fan coil appeared to be relatively new and in working order. The age and condition of the outdoor condensing unit should be verified and it should be replaced if needed.
- The air in the dorm was very stale and it appeared that the space had no mechanical ventilation. A dedicated energy recovery ventilator is recommended to be installed. This would supply fresh tempered outside air to the fan coil system.
- The bathroom exhaust system should be functionally tested and re-balanced.
- The diffusers are of mixed typed, mostly security-style grilles. It is recommended that these grilles be replaced with commercial style grilles to help reduce the “prison” feel of the space. Also, it is recommended that all of the air outlets be re-balanced.
- The three instantaneous propane water heaters in the mechanical room appear relatively new and in working order.
- The fixtures in the bathrooms are old and should be updated to ADA compliant low flow fixtures in the future.

**Small Dorm:**

- The small dorm appears to have been recently completed, with much of the equipment still having tags on them. The space is served by a combination of through the wall AC units and electric wall heaters. The bathroom is exhausted by a ceiling exhaust fan.
- There is a tank electric water heater in the closet near the entrance. It is brand new.
- All of the AC units, electric wall heaters, and exhaust fan are brand new.
- There are no recommendations for this building.

**School:**

- The school is a single-level structure with a crawl space and an attic. The space is conditioned by a single fan coil with oil heat and an outdoor condensing unit. All of the air is supplied by floor grilles and returned by a ceiling filter grille. There is a small laundry room on the East end of the building.
- The fan coil and condensing unit appear to be past their design life and are recommended to be replaced in the near future. When the fan coil is replaced, a heat recovery ventilator should be added in order to provide ventilation air to the space. A heat pump should be considered if when the fan coil system is replaced in order to eliminate the need for oil and improve energy efficiency.
- There is no condensate drain pan around the fan coil and water damage is apparent.
- The fixtures in the bathrooms are old and should be updated to ADA compliant low flow fixtures in the future.
- An exhaust fan needs to be added to the janitor's closet.

**House:**

- This is a three level house (basement, ground, upper) which is served by an oil-fired furnace (no AC) located in the basement. Air is supplied and returned to the first level through floor grilles. The upper level is served by a through the wall AC unit and an electric baseboard heater. The bathroom is exhausted by a sidewall exhaust fan. All of the HVAC appears to be relatively new and in working order.
- In the basement are a washer and dryer, water heater, and oil tank.

If you have any questions, please contact this office.

Sincerely,

Michael Slevcove, PE  
Electrical Project Engineer

Mark Koller, PE, LEED AP  
Mechanical Project Engineer

MS:MS

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# It's all about SAFETY. *HUBBELL SAFE.*



## ***Tamper-Resistant Receptacles***

*—the new standard in electrical safety.*



Spring-loaded shutter mechanism allows plugs to enter—but resists access to single-pronged items like keys, hairpins, or nails.

### **The NEC® 2008 code:**

NEC Article 406.11 requires tamper-resistant receptacles for dwelling units. "In all areas specified in 210.52, all 125 volt 15- and 20-ampere receptacles shall be listed tamper-resistant receptacles." Article 210.52 specifies where receptacles shall be installed.

### **What this means to you:**

All 15- and 20-amp, 125 volt residential receptacles must be of a type classified and listed as Tamper-Resistant (TR). This includes duplexes, GFCIs, single receptacles, clock hangers, floor boxes, and other specialty products with outlets. Receptacles, even if dedicated to a specific use and not readily accessible, must be tamper-resistant.

This affects all new construction and major renovations for single- and multi-family homes. In some instances, hotel rooms and college dormitories are classified as dwelling units.









## Why Tamper-Resistant?

The tamper-resistant code requirement is all about safety.







- Approximately 2,400 children per year suffer electrical outlet related injuries.
- For years, the design and use of tamper-resistant receptacles have been proven effective in pediatric areas and hospital installations nationwide. It makes sense to have them in homes.
- The additional cost per device is minimal and well worth it.
- Required by states that adopt 2008 NEC®.

## Tamper-Resistant Receptacles



|              |  |  |  |  |  |  |
|--------------|---|---|---|--|---|---|
|              | Standard Duplex Self-Grounding 15A 125V   | Standard Duplex Quick Thread 15A 125V   | Decorator Duplex Self-Grounding 15A 125V  | Standard Duplex Cut Ears 15A 125V  | Standard Single Receptacle 15A 125V   | Standard Single Receptacle 20A 125V   |
| Almond       | RR15SALTR   | RR15QALTR   | RRD15SALTR  | RR15KALTR  | RR151ALTR   | RR201ALTR   |
| Black        | RR15SBKTR   | RR15QBKTR   | RRD15SBKTR  | RR15KBKTR  | RR151BKTR   | RR201BKTR   |
| Brown        | RR15STR   | RR15QTR   | RRD15STR  | RR15KTR  | RR151TR   | RR201TR   |
| Gray         | —   | —   | RRD15SGYTR  | —  | RR151GYTR   | RR201GYTR   |
| Ivory        | RR15SITR  | RR15QITR  | RRD15SITR   | RR15KITR   | RR151ITR  | RR201ITR  |
| Light Almond | RR15SLATR   | RR15QLATR   | RRD15SLATR  | RR15KLATR  | RR151LATR   | RR201LATR   |
| White        | RR15SWTR  | RR15QWTR  | RRD15SWTR   | RR15KWTR   | RR151WTR  | RR201WTR  |





|              |  |  |  |  |  |  |
|--------------|---|---|---|--|---|---|
|              | Decorator Single Receptacle 15A 125V  | Decorator Single Receptacle 20A 125V  | Standard Combo SP Switch 15A 120V Receptacle 15A 125V                               | Standard Combo 3W Switch 15A 120V Receptacle 15A 125V                                | Decorator Combo SP Switch 15A 120V Receptacle 15A 125V                                | Decorator Combo 3W Switch 15A 120V Receptacle 15A 125V                                |
| Almond       | RRD151ALTR  | RRD201ALTR  | RC108ALTR   | RC308ALTR  | RCD108ALTR  | RCD308ALTR  |
| Black        | RRD151BKTR  | RRD201BKTR  | —   | —  | RCD108BKTR  | RCD308BKTR  |
| Brown        | RRD151TR  | RRD201TR  | RC108TR   | RC308TR  | —   | —   |
| Gray         | RRD151GYTR  | RRD201GYTR  | —   | —  | RCD108GYTR  | RCD308GYTR  |
| Ivory        | RRD151ITR   | RRD201ITR   | RC108ITR  | RC308ITR   | RCD108ITR   | RCD308ITR   |
| Light Almond | RRD151LATR  | RRD201LATR  | RC108LATR   | RC308LATR  | RCD108LATR  | RCD308LATR  |
| White        | RRD151WTR   | RRD201WTR   | RC108WTR  | RC308WTR   | RCD108WTR   | RCD308WTR   |

## Increasing awareness of child electrical safety




The National Electrical Manufacturers Association has developed a program titled *Real Safety* that identifies the dangers electrical receptacles may pose to children, educating users about tamper-resistant receptacle function. *Real Safety* targets electrical professionals, inspectors, distributors, builders and new homeowners. For more information visit the website at [www.childoutletsafety.org](http://www.childoutletsafety.org).

## Tamper-Resistant GFCIs and Specialty Items



|              |  |  |  |  |  |
|--------------|---|---|---|---|---|
|              | GFCI Duplex<br>15A 125V   | GFCI Duplex<br>20A 125V   | GFCI Combo<br>SP Switch 15A 120V<br>Receptacle 15A 125V                           | JLOAD™<br>Multimedia Outlet<br>15A & Jacks  | JLOAD™<br>Multimedia Outlet<br>20A & Jacks  |
| Almond       | GFTR15AL  | GFTR20AL  | GFSP15TRAL  | RJ650ALTR   | RJ620ALTR   |
| Black        | GFTR15BK  | GFTR20BK  | GFSP15TRBK  | RJ650BKTR   | RJ620BKTR   |
| Brown        | GFTR15  | GFTR20  | GFSP15TR  | —   | —   |
| Gray         | GFTR15GY  | GFTR20GY  | GFSP15TRGY  | RJ650GYTR   | RJ620GYTR   |
| Ivory        | GFTR15I   | GFTR20I   | GFSP15TRI   | RJ650ITR  | RJ620ITR  |
| Light Almond | GFTR15LA  | GFTR20LA  | GFSP15TRLA  | RJ650LATR   | RJ620LATR   |
| White        | GFTR15W   | GFTR20W   | GFSP15TRW   | RJ650WTR  | RJ620WTR  |

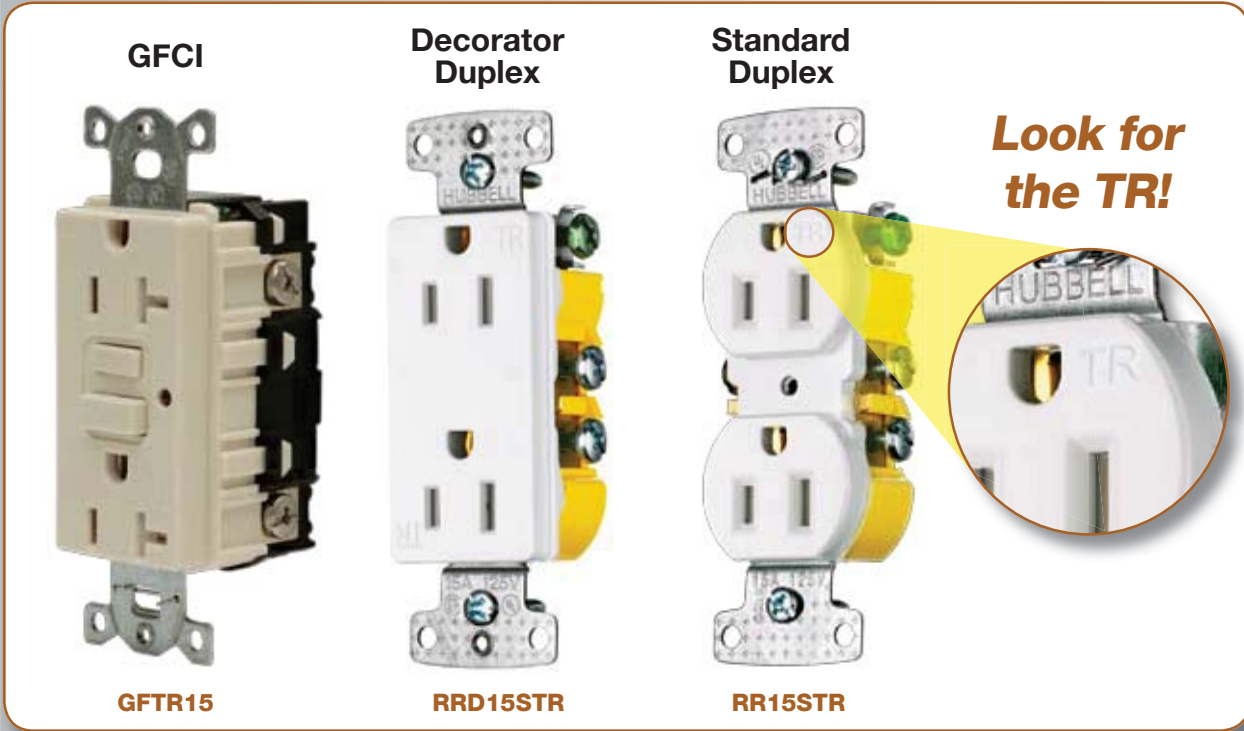
|           |  |  |  |  |  |
|-----------|---|---|--|---|---|
|           | Clock Hanger<br>15A 125V  | Single Receptacle Floor<br>Box<br>15A 125V  | Duplex Receptacle Floor<br>Box Metal<br>15A 125V                                     | Duplex Receptacle Floor<br>Box Slab-on-grade<br>15A 125V                              | Drop-in Floor Box<br>15A 125V   |
| Almond    | —   | —   | RF515AL  | RF406AL*  | —   |
| Black     | —   | —   | RF515BK  | RF406BK*  | —   |
| Brown     | —   | —   | RF515BN  | —   | —   |
| Ivory     | RR151CHITR  | —   | —  | —   | —   |
| White     | RR151CHWTR  | —   | —  | —   | —   |
| Brass     | RR151CHBSTR   | RF151TR   | RF515BS  | RF406BS*  | RF151R*   |
| Stainless | RR151CHSSTR   | —   | RF515SS  | —   | —   |

\* Not CSA Approved

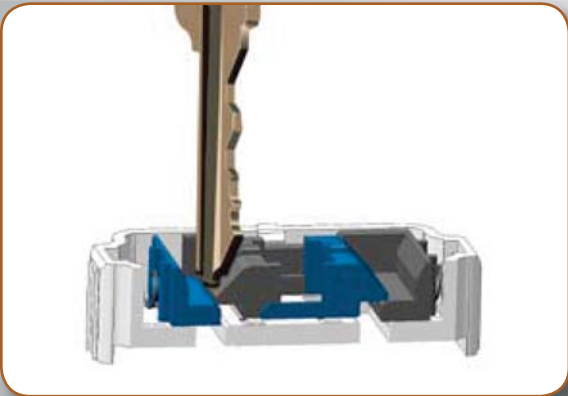


## Residential Tamper-Resistant Performance

Protection is always there with the tamper-resistant receptacles. It is reliable, automatic and permanent. With attention to design and performance, Hubbell has developed a new shutter mechanism to enable tamper-resistance to be built into standard and decorator duplexes, single receptacles, floor boxes and other power devices. At Hubbell, performance is our history, safety is our goal—now for your home.

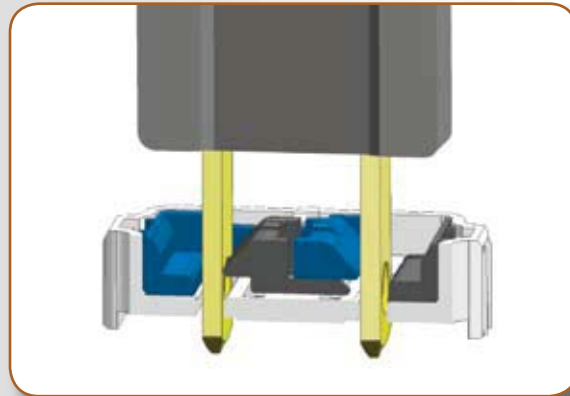


### Built-In Safety Action

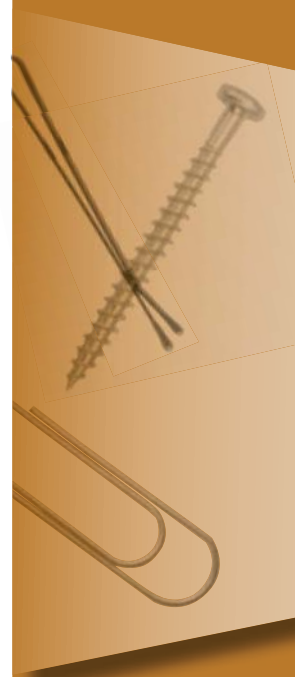


Spring-loaded shutter mechanism restricts access to an object in any one side of the receptacle.

### Power When Needed



Insertion of a two or three bladed plug will open the shutters, allowing electrical contact.







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 FAX 503.382.2262  
[www.interfaceengineering.com](http://www.interfaceengineering.com)

PORTLAND  
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 WASHINGTON, DC  
 ABU DHABI

January 14, 2015

Jason Wesolowski  
 Scott/Edwards Architecture  
 2525 E. Burnside  
 Portland, OR 97214

Re: Parrott Creek Ranch Code Update  
 2009-0661.01

Following is the revised due diligence report from January 8, 2015, with current code information:

### **ELECTRICAL**

#### **Dining Hall:**

- The main electrical panel and sub branch panel located in the lower electrical room are installed without the working clearances as required per the Oregon Electrical Specialty Code (OESC) 110.26(A)(1). The physical depth of the electrical room is not wide enough to provide sufficient working space as required by code. Fulfillment of this requirement may necessitate relocation of electrical panels/equipment. It is typically more cost effective to move electrical equipment to produce the required clearances as opposed to reconfiguring a structural wall.
- The building electrical service is 120/240V, 200A, single phase. The main distribution panel is loaded to capacity. Adds or changes to the building that significantly increase the electrical demand on the system would require upgrading the electrical service to a higher ampacity.
- The kitchen does not appear to be fed with adequate branch circuits to serve existing kitchen appliances. On-site faculty reported nuisance tripping of electrical breakers occurs when multiple appliances are operating simultaneously.
- Interior lighting fixtures are in poor condition. The majority of luminaires are supplied with T12 fluorescent lamps. Due to new state ordinances restricting the use of this lamp type, T12 lamps will be in increasingly short supply. Furthermore, magnetic ballasts are being used for fluorescent light fixtures. Several are generating an audible humming sound and are in need of replacement. Existing luminaires can be upgraded with new energy efficient lamps/ballasts, or replaced with new fixtures depending on the application. Vandal resistant luminaires are available, and should be a consideration in applicable locations.
- Surface-mounted raceways for fire alarm cabling is not supported properly at several locations. There are also areas of separation along the raceway which may compromise the fire alarm cables and expose cabling to damage/vandalism.

Mechanical and Electrical Engineering  
 Building Technologies  
 Commissioning  
 Energy Consulting  
 Fire/Life Safety  
 Lighting Design  
 Sustainable Design



- A number of receptacles and cover plates are damaged or missing, have been coated with textured wallcovering, or are lacking GFCI protection as required per OESC.



Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. Product information is included in the appendix.

- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with Oregon Structural Specialty Code (OSSC) section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.
- Existing exit signs are not in compliance with OSSC section 1011. This section requires that “Exit signs shall be illuminated at all times... [and] not less the 90 minutes in case of primary power loss” Fulfillment of this requirement will necessitate the replacement of non-illuminated exit signs and battery back-up power sources for several internally illuminated exit signs.

**Dorm:**

- The main electrical panel and sub branch panel located in the fire riser room are installed without the working clearances as required per the OESC 110.26(A)(1). Water piping is installed within the working clearance. Fulfillment of the OESC requirement may necessitate relocation of either objects located within the required clear areas or relocation of electrical panels/equipment. Except for a structural wall, it is typically more cost effective to move the objects located within the required clearance.
- The building electrical service is 120/240V, 200A, single phase.
- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with OSSC section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.
- Existing exit signs are not in compliance with OSSC section 1011. This section requires that “Exit signs shall be illuminated at all times... [and] not less the 90 minutes in case of primary power loss” Fulfillment of this requirement will necessitate the replacement of non-illuminated exit signs and battery back-up power sources for several internally illuminated exit signs.
- Fire alarm manual pull stations located at exterior egress doors are installed at approximately 55 inches AFF. Per ADA requirements the maximum height to the top of handle is 48 inches AFF.
- Fire alarm bell is hanging and not mounted correctly to ceiling in corridor. Fix mounting of fire alarm device.
- Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. However, tamper resistant receptacles are not a code required for this occupancy. Product information is included in the appendix.
- Arc-fault circuit interrupters are not installed at outlet locations as required per current OESC requirements, Oregon amendments section 210.12.

**Small Dorm:**

- The small dorm is a relatively new building, and appears to comply with current codes.
- The building electrical service is 120/240V, single phase.
- Battery backup lighting units (bug-eyes) are used to provide the required illumination along the path of egress. Self-illuminated exit signs are used to mark the egress exits in compliance with OSSC section 1011.
- Tamper resistant receptacles are used in the dwelling unit.
- GFCI receptacles are used in locations where required per the OESC.
- The electrical equipment is in good working condition.
- Arc-fault circuit interrupters are not installed at outlet locations as required per current OESC requirements, Oregon amendments section 210.12.

**School:**

- The existing battery backup lighting units (bug-eyes) do not provide the required illumination along the path of egress, and are not in compliance with OSSC section 1006. This section requires that “emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level...” Fulfillment of this requirement will necessitate the installation of additional battery backup unit lighting equipment or standard length fluorescent luminaires containing battery backup ballasts. If the existing units are to remain, the current batteries are in need of replacement.
- Fire alarm manual pull stations located at exterior egress doors are installed at approximately 55” AFF. Per ADA requirements the maximum height to the top of handle is 48” AFF.
- Existing receptacle outlets can be replaced with new tamper-resistant devices designed to protect individuals from accidental shock resulting from the insertion of foreign objects. However, tamper resistant receptacles are not a code required for this occupancy.
- Interior lighting fixtures are in fair condition and performing reasonably well. The majority of luminaires are supplied with T12 fluorescent lamps. Due to new state ordinances restricting the use of this lamp type, T12 lamps will be in increasingly short supply. Existing luminaires can be upgraded with new energy efficient lamps/ballasts, or replaced with new fixtures depending on the application. Vandal resistant luminaires are available, and should be a consideration in applicable locations.

**House:**

- This building is a three level house with an electrical installation typical of a single family residence built at the time of original construction.
- The house electrical service is 120/240V, single phase.
- Electrical receptacles have not been installed in general locations per OESC 210. Extension cords and power strips are currently utilized to compensate for the need of additional convenience receptacles.
- Several NEMA 1-15R receptacle outlets are installed. This is a typical configuration used at the time of the building’s original construction. However, this configuration lacks an equipment grounding conductor. Equipment grounding conductors help protect personnel from accidental electric shock caused by a ground fault. Receptacles with equipment grounding (e.g. NEMA 5-15R) and ground conductor are required per OESC 250.114.
- Tamper resistant receptacles are not installed per current OESC requirements, Oregon amendments section 406.11.
- GFCI outlets are not installed per OESC 210.8.
- Arc-fault circuit interrupters are not installed at outlet locations as required per current OESC requirements, Oregon amendments section 210.12.
- Exposed line voltage wire, circuit in use, was observed in space which appears to have once served a luminaire. Conceal conductors per OESC requirements.

## MECHANICAL / PLUMBING

### **Dining Hall:**

- The Dining Hall is served primarily by two split system fan coil units with oil heat. One unit appears to only serve the basement and another unit appears to only serve the main level. The fan coils and outdoor condensing units (on the roof) appear to be near the end of their design life and are recommended to be replaced in the near future. These units could be replaced with split system heat pumps, which would eliminate the need for oil heat and also provide greater efficiency.
- No means for introducing outside ventilation air were observed. It is recommended that when the split system fan coils are replaced, a small heat recovery ventilator be installed on each new fan system to introduce ventilation air into the space. This will improve indoor air quality greatly.
- There are a couple of through the wall AC units and space heaters installed, indicating that certain zones get hot and some get cold. It is recommended that the building loads and zoning be analyzed and followed up with a system air re-balancing and possible re-zoning.
- The kitchen is commercial in nature and has a Type-I (range) hood and Type-II (dishwasher) hood. The kitchen appears to have been recently updated and in reasonable working condition. It is recommended that the exhaust fans be functionally tested and re-balanced. Also, it is recommended that the grease duct be cleaned.
- Despite the fact that there are two rooftop exhaust fans for the kitchen hoods, there is no make-up air unit installed. It is recommended that a small make-up air unit for the kitchen be installed. This will improve negative building pressurization issues which were observed during the site visit (outdoor air was observed being drawn into the building at several cracks).
- The fixtures in the bathrooms are very old and should be updated to ADA compliant low flow fixtures in the future.
- The South end of the building is served by a small electric water heater located in the attic. This water heater appears to be in working condition.
- The north side of the building is served by a 50 gallon propane water heater (Rheem 21V50 / 60 MBH input). This water heater appears to be relatively new and in working order.

### **Dorm:**

- The dorm HVAC system has recently been updated and mechanical ventilation has been provided.
- The diffusers are of mixed typed, mostly security-style grilles. It is recommended that these grilles be replaced with commercial style grilles to help reduce the “prison” feel of the space. Also, it is recommended that all of the air outlets be re-balanced.
- The three instantaneous propane water heaters in the mechanical room appear relatively new and in working order.
- The fixtures in the bathrooms have been recently updated.

### **Small Dorm:**

- The small dorm appears to have been completed in recent years, with much of the equipment still having tags on them. The space is served by a combination of through the wall AC units and electric wall heaters. The bathroom is exhausted by a ceiling exhaust fan.
- There is a tank electric water heater in the closet near the entrance. It is relatively new.
- All of the AC units, electric wall heaters, and exhaust fan are relatively new.

- Fire sprinkler line entering building is 1/2 inch and is then upsized to 3/4 inch. NFPA 13 requires a minimum pipe size of 1 inch. Also, the size indicates that the system is being supplied off of the domestic water system. If so, this would not meet the requirements of any modern codes. Consider revising system to comply with code.
- Fire riser/water heater room is full of miscellaneous storage items. These items need to be removed. Suggest the room be labeled and locked to prevent unauthorized access/storage.

**School:**

- The school is a single-level structure with a crawl space and an attic. The space is conditioned by a single fan coil with oil heat and an outdoor condensing unit. All of the air is supplied by floor grilles and returned by a ceiling filter grille. There is a small laundry room on the East end of the building.
- The fan coil and condensing unit appear to be past their design life and are recommended to be replaced in the near future. When the fan coil is replaced, a heat recovery ventilator should be added in order to provide ventilation air to the space. A heat pump should be considered if when the fan coil system is replaced in order to eliminate the need for oil and improve energy efficiency.
- There is no condensate drain pan around the fan coil and water damage is apparent.
- The fixtures in the bathrooms are old and should be updated to ADA compliant low flow fixtures in the future.
- An exhaust fan needs to be added to the janitor's closet.

**House:**

- This is a three level house (basement, ground, upper) which is served by an oil-fired furnace (no AC) located in the basement. Air is supplied and returned to the first level through floor grilles. The upper level is served by a through the wall AC unit and an electric baseboard heater. The bathroom is exhausted by a sidewall exhaust fan. All of the HVAC appears to be relatively new and in working order.
- In the basement are a washer and dryer, water heater, and oil tank.



Thomas Phuong, PE, LEED AP  
Associate/Senior Electrical Engineer



Mark Koller, PE, LEED AP  
Associate/Senior Mechanical Engineer



**Purpose of Report**

This report provides information for the Parrott Creek Ranch regarding existing site conditions, constraints to future development and expected upgrades for future development at the site.

This report is not a guideline for development, nor does it contain approvals regarding proposed use of the site. It is our understanding that this report will be incorporated into other data (collected and compiled by others) for use in scoping future development. It is assumed that as the site or portions of the site develop, each individual development will procure the information necessary for preparation of construction documents based on that project's specific requirements.

**Section A: Introduction**

As requested, Harper Houf Peterson Righellis Inc. has completed the research for the Site and Facility Study for the Parrott Creek Ranch. Information has been gathered from available existing records, meeting with staff, and a site reconnaissance.

**Section B: Existing Conditions****General Information**

The site is located at 22518 S. Parrott Creek Road in Clackamas County. Per the County GIS records, the gross parcel area is approximately 32.73 acres. The site has varied grades between 2% and 20%.

Existing improvements include a farmhouse, a 6 bed dormitory, a kitchen and recreational building, a 20 bed dormitory, a skills school building, a storage building, several out buildings, parking areas and a ball field. Refer to the attached site plan for schematic representation.

This study is limited to a preliminary evaluation of exterior water service, sanitary sewer systems, storm sewer systems, and pavement surfacing.

**Water Service**

The site is currently served by a well located adjacent to the farmhouse within a small insulated wooden shed. The existing well contains a submersible pump within a 6" steel casing and is 111' deep (per well report, Oct 2000 in the appendix). The well head has a 1 ½" to 1 ¼" galvanized steel outlet pipe that travels below grade into the farmhouse basement. The existing well head appears to have sufficient setbacks from existing septic drainfields. A well pump flow test was performed by Skyles Drilling and reported a flow rate of 27.5 gpm at a pressure of 21 psi at the well head.

There are two 119 gallon free standing expansion tanks located in the basement of the farmhouse. Each tank provides approximately 40 gallons of water between pump cycles for a typical 40 to 60 psi pressure range (for a total of 80 gallons). There is also what appears to be a water softener and a chlorine injector on this system.

Domestic water is distributed from the farmhouse to the other buildings with an underground piped system. The material, size and condition of this system is unknown.

There is no fire/sprinkler service on-site.



6" Wellhead within the pump house.



Two pressure tanks (blue), water softener (grey) and chlorine dosing tank (white)

### **Sanitary Sewer Service**

The site is served by two septic systems. The Farmhouse and 6 person dorm is served by a 1000 gal septic tank and gravity fed drainfield (see site plan in the appendix). The remainder of the site is served by a much larger system which includes 2 - 3000 gal septic tanks, 1 – 3000 gal. dosing tank and 1 – 1500 gal. grease interceptor. A duplex pumping station pumps to two drainfields (see site plan in the appendix). Two hydrosplitters distribute effluent to each leg of the drainfields. Both systems have had recent work in 2009 and appear to be well maintained. A detailed report of the system and its operation was prepared in 2009 by “Lil Stinky” and includes further details of the existing system.

Basic calculations for each system (see appendix) show the Farmhouse system to be at capacity but sufficient and the Main Dorm and Kitchen facility system to be just below capacity. Note that these are basic calculations and not a detailed assessment of the existing system.



Two hydrosplitters at the west drainfield

## **Storm Sewer**

Storm water runoff generally moves to the south towards existing drainage ways on site. Several buildings are connected to a storm system and several have downspouts that discharge onto the surrounding ground.

A 12" storm main crosses the site, travels beneath the main dormitory building and discharges at the south slope of the site. Several catch basins that drain the parking area connect to this line and possibly several of the buildings. In addition to site drainage, this line collects drainage from the area above the site to drainage way to the north.



Inlet of 12" Storm line that crosses site



Inlet for parking area drainage

### **Surfacing Conditions**

The existing pavement condition is poor. The main driveway and parking area have base failure which is evident by alligator cracking and depressions. There is some evidence of spot pavement repair as well as areas of previous overlay or chipsealing.



Pavement base failure (cracking) at main entrance

**Section C: Recommendations**

The following recommendations are made based upon our preliminary analysis of existing conditions and the expectation of general improvements to the site to support new buildings or additions as well as site improvements to meet developmental requirements.

***Water:***

**Domestic:**

We have looked at existing and possible future demand and peak rates based on plumbing code calculations and typically daily usages. In a system of this type it is difficult to assess the actual peak and daily uses since there is no monitoring system. The current probable peak rate, based on an existing fixture count of 85 (see below) is 40 gpm and total daily usage is calculated at 3,750 gpd (30 residents at 125 gpd). Oregon Water Resources Department (OWRD) allows for up to 15,000 gallons per day for single or group domestic uses. The future expansion of another 20 bed dorm would increase the fixture count to approximately 120 with a peak rate of 47 gpm. The daily usage would increase up to approximately 6,250 gpd (50 residents at 125 gpd). There currently is no water rights permit for this facility because it is considered a domestic/residential well. Future expansion should be discussed with OWRD to determine if the system still meets the standards for domestic use.

Existing Fixture Count:

| Existing Fixture Count | 20 Bed Dorm | 6 Bed Dorm | Skills School | Kitchen | Farm House | Total | FU (1) | Total |
|------------------------|-------------|------------|---------------|---------|------------|-------|--------|-------|
| Water closet           | 3           | 1          | 3             | 2       | 1          | 10    | 2.5    | 25    |
| Lavatory               | 3           | 1          | 3             | 2       | 1          | 10    | 1      | 10    |
| Kitchen Sink           |             |            |               | 1       | 1          | 2     | 1.5    | 3     |
| Dishwasher             |             |            |               | 1       | 1          | 2     | 1.5    | 3     |
| Urinal                 | 3           |            | 3             |         |            | 6     | 3      | 18    |
| Shower/tub             | 3           |            |               |         | 1          | 4     | 2      | 8     |
| Hose Bib               | 2           |            | 2             | 2       | 1          | 7     | 2      | 14    |
| Washing Machine        |             |            | 1             |         |            | 1     | 4      | 4     |

Total

85

Gallons Per Minute (GPM), Peak Demand

**40.00**



Proposed Expansion Fixture Count:

| Proposed Fixture Count | 20 Bed Dorm | 6 Bed Dorm | Skills School | Kitchen | Farm House | 20 Bed Imp. | Total | FU (1) | Total |
|------------------------|-------------|------------|---------------|---------|------------|-------------|-------|--------|-------|
| Water closet           | 3           | 1          | 3             | 2       | 1          | 3           | 13    | 2.5    | 32.5  |
| Lavatory               | 3           | 1          | 3             | 2       | 1          | 3           | 13    | 1      | 13    |
| Kitchen Sink           |             |            |               | 1       | 1          |             | 2     | 1.5    | 3     |
| Dishwasher             |             |            |               | 1       | 1          |             | 2     | 1.5    | 3     |
| Urinal                 | 3           |            | 3             |         |            | 3           | 9     | 3      | 27    |
| Shower/tub             | 3           |            |               |         | 1          | 3           | 7     | 2      | 14    |
| Hose Bib               | 2           |            | 2             | 2       | 1          | 2           | 9     | 2      | 18    |
| Washing Machine        |             |            | 1             |         |            | 1           | 2     | 4      | 8     |

Total  
Gallons Per Minute (GPM), Peak Demand 118.5  
47.0

The proposed total daily gallons per day is less than the well capacity and OWRD standards but increases in peak flow will require improvements to the existing system in order to provide adequate water at peak periods. We are currently not anticipating any irrigation load, but if an irrigation system is to be installed the daily usage will increase and timing would need to be adjusted to non-peak times. OWRD allow a maximum of not more than one-half acre of irrigation use without a specific water rights permit.

Possible improvements to increase the capacity for domestic water are as follows:

- Installation of additional expansion tanks to mitigate peak demand and provide some additional storage.
- Adding a water reservoir for additional system capacity.
- Installing a new submersible pump with a higher flowrate.

The existing domestic water distribution system size, condition and location is unknown. Given the age of the system and lack of information, the distribution system will most likely need to be replaced in its entirety. This will assure adequate sizes, design life and location. Size and location of this system will be dependent on proposed improvements.

Fire Service:

The proposed improvements may require a fire sprinkler system depending on building types, size, etc. This will need to be determined by the Uniform Fire Code and will be specific to the type of improvements made. Although there are systems that can work off of a well fed water system, the existing system will require significant improvements to supply fire protection. These systems consist of a reservoir and pump to meet NFPA standards (which is typically 1500 gallons per minute for two hours duration). This type of reservoir fire system may also be combined with a domestic reservoir system. A fire suppression specialist should be employed to evaluate fire suppression options if a reservoir cannot be installed.





## **Sanitary:**

The two existing systems do not have capacity for any significant increases in residents for the facility and will require improvements designed by a licensed septic installer within Clackamas County in order to meet additional demand on the system. The following are estimated requirements using general calculations for septic systems. Refer to the siteplan in the appendix for potential facility locations.

### Farmhouse system:

- Additional Septic tank and drainfield will be required.
- Proposed Septic tank may be located downhill from future developments.
- Proposed drainfield could be placed within the limits of the existing ball field.

### Main Dormitory and Kitchen System:

- Additional Septic tanks may not be required depending on improvements. If required there is additional room in proximity of the current system.
- additional drainfield will be required and could be placed within the limits of the existing ball field.

## **Storm:**

### Stormwater Management:

Improvements to the site will require stormwater management per Water Environment Services (WES) requirements. This will most likely entail the installation of a surface stormwater facility to provide treatment and detention for the impervious area of the site. There are many different options available and the system will need to be designed to fit the future improvements. Given the site conditions and available space, surface vegetated facilities such as swales and basins would work well to meet these requirements. Facilities would need to be located downstream of the improvements and away from sanitary drainfields.

### Stormwater Conveyance System:

The existing system is at the end of usable life cycle and will require replacement or rehabilitation. The existing 12" storm main crossing the site is located beneath the existing main dormitory and should be abandoned.

A new system will be required that is properly sized and designed to meet existing and proposed development. This system will most likely consist of several piped systems serving different buildings and providing conveyance to surface vegetated treatment facilities and discharge points downgrade of the site.

## **Site:**

Seal-coating and/or overlaying the parking area is not recommended due to the poor condition of the existing pavement and failure of the subbase. The failure is so extensive that the life expectancy of maintenance measures would be minimal. It is recommended that these paved areas be reconstructed along with any new development.



# Appendix



TUESDAY 4

CLAC 56203

WELL ID # L41405

Kirk

STATE OF OREGON  
WATER SUPPLY WELL REPORT  
(as required by ORS 537.765)

SKYLES DRILLING, INC.

(START CARD) # 135753

#100

Flow Test

(1) OWNER: Well Number: 01  
Name Parrott Creek Child & Family Services, Inc.  
Address 22518 S. Parrott Creek Rd.  
City Oregon City State OR Zip 97045

(2) TYPE OF WORK:  
New Well  Deepening  Alteration (repair/recondition)  Abandonment

(3) DRILL METHOD:  
Rotary Air  Rotary Mud  Cable  Auger   
 Other pump hoist

(4) PROPOSED USE:  
X Domestic  Community  Industrial  Irrigation   
Thermal  Injection  Livestock  Other

(5) BORE HOLE CONSTRUCTION:  
Special Construction approval Yes  No  Depth of Completed Well 111 ft.  
Explosives used Yes  No  Type Amount  
HOLE SEAL  
Diameter From To Material From To Amount  
sacks or pounds  
How was seal placed: Method  A  B  C  D  E  
Other  
Backfill placed from ft. to ft. Material  
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:  
Diameter From To Gauge Steel Plastic Welded Threaded  
Casing: 6 +1.5 1.5 .250      
Liner: None  
Final location of shoe(s) None

(7) PERFORATIONS/SCREENS:  
Perforations Method  
Screens Type Material  
From To Slot Number Diameter Tele/pipe Casing Liner  
size size size size size  
None

(8) WELL TESTS: Minimum testing time is 1 hour  
 Pump  Bailer  Air  Flowing Artesian

(9) LOCATION OF WELL by legal description:  
County Clackamas Latitude Longitude  
Township 3 SOUTH N or S. Range 2 EAST E or W of WM.  
Section 30 NE 1/4 SE 1/4  
Tax lot 02800 Lot Block Subdivision  
Street Address of Well (or nearest address) 22518 S. Parrott Creek Rd., Oregon City, OR

(10) STATIC WATER LEVEL:  
49 ft. below land surface. Date 10/6/00  
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:  
Depth at which water was first found N/A  
From To Estimated Flow Rate SWL

(12) WELL LOG:  
Ground elevation  
Material From To SWL  
Extending casing, only work done.  
SKYLES DRILLING, INC.  
1169 Molalla Avenue  
Oregon City, OR 97045  
503-656-2683

RECEIVED

OCT 13 2000

WATER RESOURCES DEPT.  
SALEM, OREGON

Date started 10/6/00 Completed 10/6/00

(unbonded) Water Well Constructor Certification:  
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number 1682



## Septic Tank Sizing and Estimated Sewage Flows

### Single Family Dwellings

**Minimum Septic Tank Capacity For Single Family Dwellings**

| Number of Bedrooms        | Septic Tank Size |
|---------------------------|------------------|
| One to Two                | 1,000 Gallons    |
| Three to Four             | 1,500 Gallons    |
| Five                      | 2,000 Gallons    |
| Six                       | 2,500 Gallons    |
| Each Additional Bedroom   | Add 500 Gallons  |
| Garbage Grinder Installed | Add 500 Gallons  |

<sup>1</sup> Dens, sewing rooms, office rooms, and similar rooms which, in the opinion of the Director, are so located and designed as to be usable as bedrooms, shall be considered bedrooms for the purpose of this Section.

### Commercial, Industrial, Institutional or Multiple-Family Dwellings

The liquid capacity of septic tanks for multiple dwelling, commercial, industrial and institutional buildings shall be at least twice the maximum anticipated daily load as determined empirically or from standards of accepted good practice recognized by State and Federal national authorities. For the purposes of this Chapter the following quantities (daily load) shall be used. All uses will be considered at maximum flow.

**Quantities Of Sewage Flow**

| Type of Establishment                         | Gallons/Person/Day |
|---|--------------------|
| Apartments (central laundry facility)         | 60                 |
| Apartments (with individual laundry facility) | 75                 |
| Bars (no food preparation): 1,000 gallons +   | 15/seat            |
| Per employee                                  | 20                 |
| Boarding House                                | 50                 |
| Bowling Alleys (snack bar only)               | 75/lane            |
| Camps:  |                    |
| Campground w/ central comfort station         |                    |
| Flush toilets only                            | 25                 |
| Flush toilets and showers                     | 35                 |
| Day camps (no meals served)                   | 15                 |
| Resort Camps:                                 |                    |
| Limited plumbing                              | 50                 |

|  |                       |
|--|-----------------------|
| Full plumbing including laundry                                  | 75                    |
| Summer and seasonal  | 50                    |
| Churches (Sanctuary: minimum of 1,000 gallons)                   | 1 x church membership |
| W/ kitchen waste: 1,000 gallons +                                | 1 x church membership |
| Condominiums:  |                       |
| Central laundry facility   | 60                    |
| Individual laundry facility                                      | 75                    |
| Factory Workers (per 8 hr. shift exclusive of industrial waste): |                       |
| Without Showers  | 15                    |
| With Showers   | 35                    |
| Cafeteria, add   | 5/employee            |
| Hotels:  |                       |
| W/out private baths [per bed (2 people/bed)]                     | 50                    |
| W/ private baths [per bed (2 people/bed)]                        | 60                    |
| Institutions:  |                       |
| Nursing home   | 125                   |
| Rest Home  | 125                   |
| Resident   | 75                    |
| Laundries (self service; gallons/wash/customer)                  | 50                    |
| Mobile Home Parks (Per space - single wide)                      | 250                   |
| (Per space - double wide)  | 300                   |
| Motels [per bed(2 people/bed)]                                   | 50                    |
| W/ Kitchen [per bed (2 people/bed)]                              | 60                    |
| Offices (8 hr. shift)  | 15                    |
| Parks:   |                       |
| Picnic Parks:  |                       |
| W/ toilets only  | 5                     |
| W/ toilets and showers   | 10                    |
| Trailer Parks:   |                       |
| Individual hookup  | 250/space             |
| Central restroom (shower and laundry)                            | 200/space             |
| Central restroom (shower only)                                   | 150/space             |
| Central restroom only  | 100/space             |
| Restaurants (Grease interceptors required):                      |                       |

|   |                         |
|---|-------------------------|
| Full service w/toilets:                         | 1,000 gallons + 30/seat |
| Paper service type w/ toilets: 1,000 gallons +  | 15/seat                 |
| W/ bar add                                      | 15/bar seat             |
| For each employee add                           | 20                      |
| Rooming Houses                                  | 40                      |
| Schools:  |                         |
| Elementary students                             | 15                      |
| Intermediate and High                           | 20                      |
| W/ gym and showers add                          | 5                       |
| W/ cafeteria add                                | 3                       |
| Boarding (total waste)                          | 100                     |
| Service Stations: 1,000 gallons +               | 5/vehicle served        |
| Single Family Dwellings (minimum 1,000 gallons) | 75                      |
| Stores: (1,000 gallons minimum)                 |                         |
| Per employee                                    | 20                      |
| Per 10 square feet                              | 1                       |
| Swimming Pools and Bath Houses                  | 10                      |
| Theaters,                                       |                         |
| Auditoriums                                     | 5/seat                  |
| Drive-in  | 10/space                |





Since 1948

**Skyles Drilling, Inc.**  
21912 S. Beaver Creek Rd.  
Oregon City, Oregon 97045  
503-656-2683 info@skyleswelldrilling.com

December 21, 2009

Parrott Creek Child & Family Services  
22518 S Parrott Creek Rd  
Oregon City, OR 97045

Harper Houf Peterson Righellis Inc  
Attention: Bruce Haunreiter  
205 SE Spokane Street, Suite 200  
Portland, Oregon 97202

**RE: TWO HOUR FLOW TEST RESULTS**

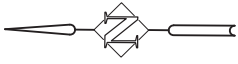
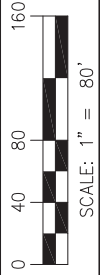
We certify that the well serving **22518 S Parrott Creek Rd., Oregon City, OR** pumps **27.57 gallons per minute** at **21 psi** after a continuous two hour pumping period.

Regards,

Kirk Wood  
General Manager

KJW/mae





SITE INVESTIGATION PLAN  
 PARROT CREEK RANCH  
 OREGON CITY, OR

**HP**  
 Harper  
 Hoult Peterson  
 Righelits Inc.  
 ENGINEERS ARCHITECTS  
 207 NE Spokane Street, Suite 200, Portland, OR 97202  
 Phone: 503.221.1131 www.harperhoultpeterson.com Fax: 503.221.1131

|           |             |
|-----------|-------------|
| DESIGNER: | BMH         |
| DRAWN:    | BMH         |
| CHECKED:  | TAK         |
| DATE:     | 12-9-2009   |
| REVISIONS |             |
| NO.       | DESCRIPTION |
|           |             |
|           |             |
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|           |             |

SHEET NO.  
 USER NO.: SEP-4-03



# Memorandum

SEA-33

**TO: JASON WESOLOWSKI**  
SCOTT EDWARDS ARCHITECTURE

**FROM: BRUCE HAUNREITER, P.E.**  
HARPER HOUF PETERSON RIGHELLIS INC.

**DATE:** JANUARY 22, 2010

**RE: PARROTT CREEK RANCH – SEPTIC SYSTEM IMPROVEMENTS**

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**Harper  
Houf Peterson  
Righellis Inc.**

ENGINEERS ♦ PLANNERS  
LANDSCAPE ARCHITECTS ♦ SURVEYORS

205 SE Spokane Street, Suite 200, Portland, OR 97202  
PHONE: 503.221.1131 www.hhpr.com FAX: 503.221.1171

Future improvements to the Parrott Creek Ranch will require expansion of the existing on-site septic system as discussed in the feasibility report. Additional information has been provided concerning the existing ball field and the possibility that the soils will not be adequate for additional drainfield installation. In discussions with Smits and Associates (septic system designer for the site) an alternative to drainfield expansion would be the installation of an advanced treatment system that would extend the capacity of existing drainfields and provide additional capacity for future expansion.

If additional design information or estimates are desired on this type of system, it is recommended that Smits and Associates perform a preliminary system design.

## **Attachment 2**

### **Parrott Creek Master Plan Phasing Notes**

## Cost Analysis (con't)

| Phase                               | Building Area SF                           | Estimated Hard Costs | 10% Contingency | 20% Soft Costs | Subtotal    | 5% Escalation | Total       |             |
|-------------------------------------|--|----------------------|-----------------|----------------|-------------|---------------|-------------|-------------|
| 4                                   | <b>SHELTER CARE DORM</b>                   |                      |                 |                |             |               |             |             |
|                                     | New 10-bed dorm                            | 3,150                | \$488,000       |                |             |               |             |             |
|                                     | Upgrade well systems                       |                      | \$10,000        |                |             |               |             |             |
|                                     | Expand septic system                       |                      | \$12,000        |                |             |               |             |             |
|                                     |  | \$510,000            | \$51,000        | \$102,000      | \$663,000   | \$33,150      | \$696,150   |             |
| 1                                   | <b>RESIDENTIAL CARE DORM</b>               |                      |                 |                |             |               |             |             |
|                                     | New 20-bed dorm                            | 4,700                | \$815,000       |                |             |               |             |             |
|                                     | New storage building                       | 600                  | \$16,500        |                |             |               |             |             |
|                                     | Demolish Old Storage Building              |                      | \$3,000         |                |             |               |             |             |
|                                     | Demolish Old School Building               |                      | \$15,000        |                |             |               |             |             |
|                                     |  | \$849,500            | \$84,950        | \$169,900      | \$1,104,350 | \$110,435     | \$1,214,785 |             |
| 5                                   | <b>RECREATION / LOUNGE</b>                 |                      |                 |                |             |               |             |             |
|                                     | Renovate old dorm                          | 2,400                | \$177,000       |                |             |               |             |             |
|                                     | Add covered structure                      |                      | \$45,000        |                |             |               |             |             |
|                                     |  | \$222,000            | \$22,200        | \$44,400       | \$288,600   | \$36,075      | \$324,675   |             |
| 2                                   | <b>ADMINISTRATION / THERAPY &amp; SITE</b> |                      |                 |                |             |               |             |             |
|                                     | New administration wing/therapy suite      | 3,280                | \$480,000       |                |             |               |             |             |
|                                     | Dining & kitchen renovation                | 2,375                | \$120,000       |                |             |               |             |             |
|                                     | Kitchen addition & walk-in                 | 70                   | \$65,000        |                |             |               |             |             |
|                                     | Site work                                  |                      | \$670,000       |                |             |               |             |             |
|                                     |  | \$1,335,000          | \$133,500       | \$267,000      | \$1,735,500 | \$347,100     | \$2,082,600 |             |
| 3                                   | <b>HIGH SCHOOL &amp; RECREATION</b>        |                      |                 |                |             |               |             |             |
|                                     | Renovate basement for School               | 2,400                | \$214,000       |                |             |               |             |             |
|                                     | Elevator                                   |                      | \$50,000        |                |             |               |             |             |
|                                     | New cover over basketball court            |                      | \$45,000        |                |             |               |             |             |
|                                     | Ball field grading & drainage              |                      | \$70,000        |                |             |               |             |             |
|                                     |  | \$379,000            | \$37,900        | \$75,800       | \$492,700   | \$117,016     | \$609,716   |             |
| <b>Totals</b>                       |  | 18,975               | \$3,295,500     | \$329,550      | \$659,100   | \$4,284,150   | \$643,776   | \$4,927,926 |
| <b>POTENTIAL FUTURE EXPANSION</b>   |  |                      |                 |                |             |               |             |             |
| Additional 10-bed shelter care dorm | 2,050                                      | \$425,000            | \$42,500        | \$85,000       | \$552,500   | \$27,625      | \$580,125   |             |

## Attachment 3

### Parrott Creek Child & Family Services -Strategic Business Plan Outline – for the time period of the next 1-3 years depending on the objectives –

#### **Goal 1. Stable funding sources- Parrott Creek has adequate resources to maintain effective programming**

##### Consistent government/contract funding

- Strengthen relationships with strategic partners (Clackamas Co., OYA, major contributors)
- Raising awareness of reality of what current funding levels buy as services
- Explore more county funding for residential work
- Educate those who place kids about Parrott Creek

##### Increase Fundraising

- Fill the gap between contract funding and actual cost
- Sufficient funds to support appropriately staffed organization
- Six months of operating reserves (e.g. \$600,000)
- Identify and expand partnerships with foundations
- Strengthen donor relationships, involve board so it is more peer to peer
- More point of entry events

##### Define an ongoing revenue stream

- Property
- Mission related business

##### Expand and Improve Marketing

- Increase public awareness of who Parrott Creek is and what we do
- Market public benefit and return on investment of our core competencies
- Enhance public profile-staff volunteer in community-presence in schools
- Increase client testimonials
- Interface more often with other professionals, social service agencies, referral agencies
- Create a case statement

##### Implement an Evaluation of PC Programs

- Measure and demonstrate the success of PC programs
- Measure impact, report outcomes, and develop best practices

#### **Goal 2. Personnel- Staff, Board and Volunteers- Parrott Creek is a great place to work and volunteer**

##### Staff- that is well trained and paid at competitive wages

- Appropriately staffed organizational structure
- Provide market rate wages for staff with retirement – to retain excellent staff
- Staff leadership development and succession planning
- Consistent training- professional development funding
- Communication enhancement for staff

##### A strong and vibrant board

- Recruit additional board members
- Establish board committees – job descriptions, membership, team leaders
- Establish board sustainability/succession plan
- Board training and professional development opportunities
- Advisory council(s) to augment the work of the board
- Emphasize fundraising expectation



- Commitment to board diversity-past family or client on board
- More opportunity for board/staff interaction and info sharing

#### Volunteer support structure

- Dedicated staff member to recruit, train, and manage volunteers
- Creating group volunteer projects - for groups from companies
- Providing volunteer opportunities that match individual volunteer's interests, skills and schedule
- Establish positive relationships between staff and volunteers
- Volunteer recognition and appreciation
- Volunteer training and screening process
- Recruitment of more volunteers

### **Goal 3. Programming- Parrott Creek is a vital link in creating healthy family systems**

#### Expand Community Based Programming- for the general public and for current clients

- Market analysis of what the community wants, needs
- Identify facility/staff/infrastructure needs
- Develop cost and billing structure
- Fee for Service
  - o Youth Mental Health
  - o Family Counseling
  - o D & A counseling for current clients
  - o Post Residential Services
- Prevention (working with youth, families, schools before juvenile justice involved)
  - o Educational Workshops for parents, teachers [and/or] Groups for youth
    - Substance Abuse Education, Delinquency prevention
    - Sexual Acting Out Behavior/Sexting
    - Bullying/Cyber Bullying
    - Gender Roles, Healthy Personal Values, Teen Development

### **Goal 4. Improve Capital Assets-The Ranch is a physically beautiful place that meets the needs of staff and clients**

#### Current campus improvements

- Improve relationships with county commissioners and key staff
- Communication; develop clear and concise list of capital needs
- Update lease agreement/renegeotiate
- Build new relationships with vendors/businesses to help with repairs, use skilled volunteers

#### Master Plan

- Use parts of the Master Plan that make sense for current needs; single rooms
- Thoughtful, measured steps, focused on bigger vision
- Targeted development efforts that will set up PC for a capital campaign
- Develop marketing plan to solicit capital funds

*Parking lot list - Mission Related Business- Supplement contract and private gift funding*

**Attachment 4**  
**PARROTT CREEK CHILD & FAMILY SERVICES**  
BOARD OF DIRECTORS  
February 2015

**Chair**

Donna Bane, Non-Profit Organization Consultant

**Vice Chair**

Butch Pollard, President at Supply Source

**Secretary/Treasurer**

Missy Wryn, Director of Finance, Merlo Corporation

**Members**

William Bruce Shepley, Lawyer/Judge

Tammy Haney, DHS/Child Welfare

Gayland R. Looney, Owner-Perlo Construction

John Wentworth, Senior Deputy DA, Clackamas County

John Tucker, CEO, Dave's Killer Bread

**Advisory Members**

John Foote, District Attorney, Clackamas County

Wilda Parks, Former CEO N. Clackamas Chamber

Joshua Monda, VP of Sales/Co-Founder

Grindstone Collection Strategies, Inc.

Former Client of Residential Program

**Emeritus Members**

Lloyd Anderson, Retired CEO Port of Portland

Sandy Lindquist

Laura Henderson, Healthcare Sales

Doug Fogg, Retired Health Care Administrator

John Foote, District Attorney, Clackamas County

John T. Lauka, CPA Lauka & Associates

## Attachment 5

### Parrott Creek Child & Family Services Capital Campaign Readiness

#### **What is the capacity building history of Parrott Creek to date?**

Parrott Creek Child and Family Services contracted with me in January of 2013 to help them increase their ability to raise funds. I did this by working closely with the Executive Director and board after an assessment/training process followed by a development plan. At that time they had a quick succession of development directors (common in the sector) and they wanted to regroup before hiring another one.

The board and staff responded quickly to my teaching of best practices in fundraising and in the last several years there has been a 66% increase in giving.

In 2014 Abby Link was hired as a part time Development Director. In a short period of time she demonstrated her ability to raise funds and soon after her hours were increased to fulltime. During her tenure our Annual Fundraising Luncheon giving increased 33%. She is adept at meeting with individual donors and building closer relationship with them, networking in the community and assisting with and creating successful strategies for fundraising, donor cultivation/stewardship, and campaigns.

During the last two and a half years the board has increased its personal giving, become more involved in asking for financial support from their personal networks and are actively participating in cultivating and stewarding donors. This bodes well for a future capital campaign because board members are a central part of the fundraising process.

In a short period of time Parrott Creek has strengthened its infrastructure around fundraising making it more likely than ever for them to complete the first phase of the Master Plan.

#### **What does the outline of the 1<sup>st</sup> phase of the capital campaign look like?**

An important step in creating a successful campaign that includes a government stakeholder is demonstrating to funder a strong partnership between the nonprofit and the government. This includes a clear understanding of the ownership of the property and financial support for the project.

The next step is getting a solid cost on the project by meeting with the architect, and any other contractors who will help determine the costs for the campaign.

Ongoing Parrott Creek will continue to deepen and develop relationships with existing donors and prospects that have the capacity to give at the leadership level for the campaign. This includes; one on one visits as well as small and large group activities, tours of the facility, speaking engagements around the area.

Once there is a clear understanding with the County about their role and contribution to the campaign and the cost of the project is determined, the Quiet Phase of the campaign is started. This includes asking donors with capacity to help make lead gifts, meeting with supporters who could provide in-kind support (lumber, windows, etc.) and informing foundations that Parrott Creek has a relationship with that this campaign has started. In the conversations with the foundations they will be asked if they would be interested in giving to the campaign, if so about how much and at what point they would be willing to consider making a gift. In general foundations will not make a gift unless the organization has raised 40-70% of the total goal.

#### **List of committed and likely gifts**

##### Sources

Seed money from a donor - \$50,000 with the potential to give again (committed)  
Board and Leadership Staff- to be determined  
Parrott Creek donors with capacity  
Foundations

##### Likely sources

CDBG  
County  
In-Kind- sources for lumber and windows  
State

## **Attachment 6**

### **Timber Harvest Possibilities Parrot Creek Property**

**TIMBER HARVEST POSSIBILITIES**  
**PARROT CREEK PROPERTY**

April 17, 2014



Dan Green  
County Forester

(503) 742-4425

## **ENVIRONMENTAL EVALUATION**

### **Possible Timber Sales**

#### **LOCATION AND SUMMARY OF ACTIVITIES**

The Parrot Creek property is located in the Parrot Creek drainage east Canby and south of Oregon City in Tax Lots 2800, 2801 and 2890 in Section 30, Township 3 South, and Range 2 East. This area was logged in the late 1930s and left to regenerate naturally. The results are variable. There are some areas with only stands of alder and maple while other areas have nice patches of fir and cedar.

Of the 80 acres in the County-owned property, approximately 41 acres are forested. The rest of the property is an abandoned pasture, a swamp and a youth facility.

A road will need to be built to connect the harvest areas with Parrot Creek Road, a County road. There are three possible harvest units. Buffer strips must be left for 70 feet on each side of Parrot Creek and for 50 feet on each side of two unnamed tributary creeks. Approximately 70 leave trees must be left in the harvest area when they are cut. In the rest of the units all merchantable timber should be harvested. Because of the patchy nature of the timber stands, this property is not a good candidate for thinning.

The harvested area should be piled after logging and re-planted with Douglas-fir and cedar seedlings. The abandoned pasture to the west could also be planted. The soil there is very shallow with sticky clay below. The best bet is to plant valley ponderosa pine with Douglas-fir and cedar where the soil is deepest.

If all three units were harvested they would produce approximately 1,000 thousand board feet (811 MBF Douglas-fir, 37 MBF alder, 108 MBF western red cedar, and 74 MBF maple).

#### **INTRODUCTION**

This section of the report describes the resources present in this area, the expected impacts and mitigation measures to be taken during harvest operations.

#### **SETTING**

The 80-acre Parrot Creek Tract is an upland forest and riparian forest type in the Western Hemlock Vegetation Zone. The entire area is forested with Douglas fir, western hemlock, red cedar, alder, big leaf maple and cottonwood. This forest is approximately 70 years old.. Elevations range from 200 to 400 feet. Parrot Creek County road accesses this property. A temporary logging road about 2000 feet long will need to be constructed within the sale area. Parrot Creek flows across the sale area from east to west, splitting it

roughly in half. Parrot Creek is a medium sized fish bearing stream. Short portions of two unnamed tributaries are small fish bearing streams until their gradient becomes too steep. There is a residential youth facility located on the north edge of the property at the end of Parrot Creek Road. It occupies about 5 acres. There is a wetland west of the youth facility, well separated from the logging activity.

## **GEOLOGY AND SOILS**

The Parrot Creek tract faces either to the south or to the north, depending upon which side of Parrot Creek the land is located. The land varies tremendously with some moderately steep slopes ranging up to 50% interspersed with flat benches. Several short steep gullies drain the north facing slopes and two more established streams drain the south facing slopes. The landscape that the tract is part of is a product of past volcanic activity and erosion. The soil in the forested area is mostly Jory silty clay soil which is well-drained and well-suited for tree planting and growing.

Most of the pasture area is Powell silt loam soil which is poorly drained with a hardpan about 15 inches deep. These soils are marginal for timber production. Slopes within the harvest unit range from flat to 50%.

## **VEGETATION**

The forest vegetation has been described in a previous paragraph. Under-story vegetation consists of ferns, salal, salmon berry, vine maple, Indian plum and Himalaya blackberry. The plant community is what one would expect for a low elevation forest in this area.

## **ANIMALS AND FISH**

Deer are common in the area and forage on the shrubs and grass. Their trails and beds can be found over the entire area. Beaver dams are present on Parrot Creek, below the sale area. There is no sign of other large wildlife but the common predators are probably present occasionally and all the common smaller mammals and birds typical of the upland and riparian forest types of the Pacific Northwest would certainly be expected to occur here.

Parrot Creek is a fish-bearing stream with no barriers to fish passage between the sale area and the Willamette River. A barrier to Willamette was removed in 2009 but it is not known by us whether or not salmon have returned.

## **CULTURAL RESOURCES**

There are no obvious cultural resources connected with this site. There are some artifacts of logging on the site (old roads and old cable) but nothing of significance.

**There is a buried fiber optic phone cable that enters the property on the south east corner and crosses on a diagonal to the youth facility. Protection of that cable during any logging should be emphasized.**

## **TRANSPORTATION SYSTEM**

A dirt road will need to be built to connect the County road with the logging area. The road will need to cross the first of the unnamed tributaries and also Parrot Creek. It is expected that these crossing will be temporary in nature and will be removed completely before the end of September. All in-stream work will be done under a written plan to be filed with the Oregon State Department of Forestry. Activity is only allowed during summer periods when fish are not in the streams.

## **SILVICULTURE PRESCRIPTION**

This sale will harvest about 1,000 thousand board feet (MBF) from approximately 31 acres. A 70-foot-wide, each side buffer must be left on Parrot Creek to protect that stream. A 50-foot-wide, each side, no-touch buffer must be left along the two unnamed tributaries. They both support fish for their entire transit of County property. A total of at least 65 mature trees must be left in clumps and strips in and adjacent to the harvest areas to provide for wildlife trees and structural diversity.

Slash and brush in areas which are harvested should be piled with an excavator and the piles should be burned, weather and other circumstances permitting. The harvested area and the pasture to the west should be reforested in the winter after logging. Herbicides will be needed to control invasive plants, such as blackberries, and aggressive native plants that might overtop or damage seedling trees. Without herbicides to control the invasive blackberries it is doubtful that a successful plantation can be established. The harvested areas will be planted with a mix of Douglas-fir and western red cedar. The pasture area will be planted with the valley ponderosa pine, Douglas-fir, cedar and with Oregon ash, if available.

## **RECREATION POTENTIAL AND VIEWSHED**

Recreation on the site is not encouraged due to the security concerns of the Parrot Creek Youth Facility. The property is not visible from any major road. Two or three neighboring houses to the south will be able to look north into any harvest area and beyond. The people in the Youth Facility and the house immediately to the north will be able to see the harvested area through a screen of standing timber.

## **PUBLIC INVOLVMENT**

In 2009 a letter was sent to 20 neighboring landowners. I met with two couples and talked by phone with three other landowners. Reaction has been varied. One landowner has talked with me a couple of times and has evidently talked with people in the



Commissioners' office and with various people in the neighborhood. The bulk of the other landowners were not concerned about our plans and wanted me to know that. One of those was concerned that the County road was too steep for log trucks. A landowner on the southeast corner was concerned about the stability of their trees if ours are cut and the stability of the soil near their house.

About 20 people attended a tour of the sale we proposed in 2009. Only 4 neighboring properties were represented. All of the folks opposed the sale. Only one of the neighbors had a specific concern. He wanted reassurance that our harvest would not imperil the slope stability of the area by his house. We visited the area with the geotechnical specialist from State Forestry. His input was reassuring but he did not want to write a letter.

Several of the folks were from Oak Grove and several more were from Oregon City. They objected to cutting trees "so close" to town and rural neighborhoods. That level of opposition was enough that the Commissioners then serving did not want to go forward with the sale.

## **CHOICES FOR FUTURE HARVEST**

This property does not lend itself to thinning. The timber is older and scattered or patchy. It can be left alone or it can be clear cut harvested. But thinning would be pointless.

The harvest is relatively easy to do except for the stream crossings. All of the area (except for the 2 acre piece) can be logged with tracked equipment – commonly referred to as shovel logging. Streams divide the area into four units that could be logged separately but would probably be most economically logged all at one time. Estimated dollar values for each piece assume that they are logged together. Returns will suffer if they are logged in small bits. Areas are shown on the attached map.

**The 2.5 Acre Area:** This area is directly east of the youth facility. It has a higher percentage of evergreen trees (conifers) than the other areas. It is easy to access and does not require crossing the stream. But it will have the greatest impact on the view from the youth facility and from the houses of two of the most vocal opponents from 2009. There is about 80 MBF of timber on the property worth about \$50,000.

**The 7 Acre Area:** This area is the northeast corner of the property. It has areas of no commercial value (maple) and others with nice timber. It should have about 225 MBF of timber worth about \$135,000. It will require 500 feet of new road to be constructed and a creek to be crossed.

**The 2 Acre Area:** This area should probably be left alone. It is steep, rocky, and has almost no commercial timber. Accessing it would be difficult and would require an additional stream crossing which might cost more than the timber that could be removed.

The 19 Acre Area: This area should have about 600 MBF of timber worth about \$350,000. It would require a crossing of Parrot Creek and 1500 feet of road construction past the end of the road required for the 7 acre area. We would be well advised to get a geotechnical engineer to look at the south line and decide whether the steep areas are stable. The landowner on our south line requested that of us.

### **REFORESTATION CONCERNS**

Himalayan blackberries are well established on the property and will cause serious problems with any reforestation efforts. Plans to reforest should definitely include spraying the blackberries.

The abandoned pasture can be planted and put to some use. Valley ponderosa pine should be planted on all of the worst soil and Douglas-fir and cedar only on the best soil. Again, use of herbicides will be necessary to have a successful plantation.

Parrot Creek Property  
Harvesting Options  
Section 30, Township 3 South, and Range 2 East

