

**ASSESSMENT REPORT
FOR
CAMP WOODLAND ALTARS**

**SOUTHERN OHIO DISTRICT
CHURCH OF THE BRETHREN**

OCTOBER 4, 2013

**PREPARED BY
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INTRODUCTION

This study was authorized by the Southern Ohio District Board for purpose of assessing existing conditions of the buildings and infrastructure at Woodland Altars, with the objective of identifying, quantifying and prioritizing needed repairs/replacements and improvements, projecting costs for repairs and improvements and establishing an on-going maintenance budget.

The study assumes Woodland Altars will continue to be operated in the manner it has been; for church camps, outdoor educations, band camps, family camping, District retreats and events, church retreats and rentals for private events and camping. The categories included in the assessment are:

Life Safety

Provision of practical and code required features intended for quick and safe egress from the buildings should be a top priority. In buildings with sleeping rooms and assembly rooms accommodating large gatherings, life safety is particularly critical

Health Safety

Provision of sanitary conditions for food service preparation and dining areas, properly working food service equipment, sanitary conditions in restrooms and showers and adequate ventilation in all types of spaces should also be a top priority.

Accessibility

In general, camp facilities do not accommodate physically challenged persons. The Federal Americans with Disabilities Act requires facilities serving the public to provide, or at least make an effort to provide accessibility into buildings and facilities, accessible pathways within buildings and accessible restroom fixtures.

Repair/Replacement

This category includes virtually all building components, materials, surfaces and equipment. Examples are leaks, poorly operating appliances and equipment, improperly functioning door hardware and windows and deteriorated finish surfaces.

Maintenance

This category includes routine servicing and repair of mechanical and plumbing equipment, life safety equipment, septic and sanitary systems, as well as periodic checks of roofing, insect and rodent infestations and hardware. In general, routine maintenance of camp facilities has been spotty, much has been neglected and much has been reactive rather than proactive. Developing a routine and on-going maintenance program should be a priority.

The information included in this study came from numerous sources. Assessments of visible conditions were made through detailed on-site inspections of all buildings and infrastructure. Original plans for Heritage Lodge, the swimming pool, Sugar Grove Lodge and several septic systems were examined. Personal interviews were conducted with Robin Waddell, Vonda Jones and Roger Crusier to benefit from their first-hand experience with the issues addressed in this study. Walk-thrus of camp facilities were conducted with Tom Dillon, Karen Dillon and Gary Crim on one occasion and with Ken Oren, Jim Oren and Dean Dohner on another occasion. Consultations were held with Mechanical Consultant Shane Gosney, to review the boiler issue at Heritage Lodge. A telephone interview was held with Clyde Pertuset, the contractor servicing the six on-site septic systems for the last twenty-plus years. Adams County Regional Water District was consulted regarding the water service to camp facilities. The sanitarian at Adams County Health Department was consulted regarding their oversight of existing septic

systems. Tom and Karen Dillon provided a detailed list of problems and issues noted while serving as interim directors for Outdoor Ministries at camp and during their recent walk-thrus. Nearly all the visible conditions and issues noted in this report have been documented via photographs.

BUILDING ASSESSMENT

Heritage Lodge (constructed circa 1967)

Life Safety:

1. Replace (6) existing exit signs with new units having battery backup, LED lamps and twin emergency light heads.
2. Install (6) additional exit signs having battery backup, LED lamps and twin emergency light heads.
3. Put the existing fire alarm system into proper working condition; replace the (4) existing alarm devices with new horn/strobe units, replace the (2) hardwired smoke detectors in dorm rooms.
4. Add (2) new smoke detectors; one each in hallway outside each dorm room.
5. Remove manual deadbolts from stairway egress door, kitchen egress door and all (4) egress doors in lower level meeting room.
6. Replace the panic hardware on all (7) doors noted in Item 5 above, so deadbolts are not needed for building security.
7. Replace the egress windows in both dorm rooms with units that are hinged and can be locked. Rearrange beds so clear access is provided to these windows. Provide wood steps beneath egress window. Two of the new exit lights noted in Item 2 above should be installed above these windows.
8. Replace the (2) receptacles in men's restroom with GFI device.
9. Add closer on door in lower level stairway.
10. Remove hold-open device on lower level stair door and on boiler room door.
11. Install (2) carbon monoxide detectors on lower level.
12. Add 6" height to upper level stair landing and balcony railings to provide 42" total height. Install additional balusters to reduce gaps between balusters to minimum of 4".
13. Replace receptacle in kitchen staff restroom with GFI device.
14. Install cover-plate over open junction box in boiler room.

Health Safety:

1. Repair/replace exhaust fan for restrooms and shower rooms. Currently, exhaust system is not operating, requiring use of fans and dehumidifiers to remove moisture.
2. Repair/replace kitchen cooking hood exhaust fan.
3. Repair/replace dishwasher exhaust fan.
4. Replace freezer, existing reach-in freezer does not maintain 0°.
5. Repair/replace walk-in cooler condensing unit and move unit to exterior of building. In warm weather cooler will not maintain temperature setting.
6. Install hand-washing sink in kitchen.
7. Remove drinking fountain in lower level meeting room; sanitary line dumps to grade only six feet from building.
8. Assure hot water temperature to hand sinks and showers does not exceed 110°F.
9. Install dampered make-up louver in kitchen, to replace air exhausted via cooking and dishwasher exhaust systems. Currently, when windows and doors in kitchen are closed, air is borrowed from dining room.
10. Replace deteriorated shower and toilet partitions.
11. Install night light in lower level hallway.

Accessibility:

1. Change knobs on doors to lever handles.
2. Extend concrete ramp at upper level entrance to be flush with exterior pavement for accessibility to door.
3. Replace faucet knobs on at least one lavatory in men's restroom with lever handles.
4. Consider modifying one toilet stall in each restroom to better accommodate accessibility.
5. Accessibility between floors would be economically infeasible. On occasions where persons need accessibility to restrooms and dorms, consider scheduling the event in lower level meeting room with food service catered to that room.

Repair/Replacement:

1. Repair/replace cabinet heater in stairway upper landing.
2. Repair (2) non-operating unit ventilators in lower level meeting room.
3. Replace the twin boilers; one does not work at all, the other has to be frequently reset.
4. Replace the badly rusted light fixture in women's restroom. Check wiring and replace if deteriorated.
5. Remove concrete topping slab over restrooms, shower rooms and boiler room, replace waterproof membrane and install new topping slab with water repellent treatment. The consistent leaking along joint between wall and ceiling cannot be stopped without this significant repair.
6. Repair fan-coil air conditioning unit in kitchen; currently leaking onto kitchen equipment.
7. Repair plumbing fixture leaks in restrooms and kitchen.
8. Repair/replace (1) light fixture under the balcony slab.
9. Fully engage anchor bolts on two steel support posts for balcony railing.
10. Consider removing the vinyl asbestos floor tile in kitchen and installing new tile.
11. Repair/replace several light fixtures in office area.
12. Consider replacing the convection oven, range and warmer.
13. Consider purchasing an ice maker.
14. Remove (replace if active) all exposed plastic sheathed electrical wiring beneath the wood deck.
15. Check and repair loose receptacle junction boxes.
16. Employ licensed electrician to do a once-thru inspection and make corrections to safety issues and NEC violations, particularly to electrical service equipment, fused disconnects, deteriorated wiring, check connections and improperly protected wiring.
17. Replace floor in walk-in cooler in kitchen.

Maintenance:

1. Clean/replace filters in (3) existing unit ventilators twice per year.
2. Check and replace as needed batteries in all exit and emergency lighting fixtures and in all smoke detectors once per year.
3. Immediately service leaking plumbing fixtures, piping valves, fittings, etc. on as-needed basis. Do not allow leaking to continue unattended.
4. Have building checked for insect infestation every two years, or sooner if evidence of problem. Immediately obtain service for infestation if needed.
5. Routinely clean grease trap for kitchen.
6. Check and service thru-wall air conditioners, boilers, pumps, motors on unit ventilators and unit heaters once per year. Repair components immediately if not working properly.

7. Check and service exhaust fans in restrooms and kitchen very two years. Repair immediately when noted to not be working properly.
8. Routinely clean grease trap and filters in cooking hood.
9. Clean gutters twice per year.
10. Have all fire extinguishers serviced and certified once per year.
11. Have the fire alarm system checked and tested once per year.

Swimming Pool/Bath House (Pool constructed circa 1967, Bath House Constructed 2010)

Life Safety:

1. Remove the 1 ½” PVC fill pipe running from filter room across pool deck to pool at the diving end. Removal requires repair/replacement of original fill piping discussed under Repair section below.
2. Install land phone line for emergency call-outs.

Health Safety:

1. Pool water filters need to be repaired/serviced.
2. Service and repair chlorine equipment as needed to maintain proper Ph levels.
3. Purchase new vacuum for cleaning pool.
4. Remove slide pool or change water supply to run from filtered, treated swimming pool system.

Accessibility:

1. Bath house is fully ADA compliant, including showers.
2. Pool is not ADA compliant. Consider providing accessibility to the pool in future.

Repair/Replacement:

1. The structural deck at diving end is roof over filter room. Water intrusion through concrete has caused rusting of reinforcing steel and spauling of concrete on underside of structural slab. Apply water repellent coating on topside of structural deck to prevent further deterioration of slab.
2. Remove the PVC water line exiting filter room via transom over access doors to room; install ventilation louver in transom per original design.
3. Install aluminum caps on exposed ends and tops of beams for Bath House roof.
4. Replace the badly deteriorated metal doors/frames and door hardware to filter room. Currently, doors cannot be locked to secure the room.
5. Install new hangers to replace the deteriorated pipe hangers for filter piping. Remove the temporary concrete block supports beneath failed hangers.
6. Install an exhaust fan and louver at corner of filter room opposite the new transom louver discussed in Item 2 above to properly ventilate room and prevent continuing deterioration.
7. Repair all leaks in joints and fittings associated with the pool fill and filter piping.

Maintenance:

1. Routinely check and have pool filter system serviced. Replace filter media when determined necessary.
2. Routinely have chlorine system checked and serviced.

3. Have Bath House checked for termite infestation every two years or sooner if evidence of infestation.
4. Immediately service leaking plumbing fixtures, piping, valves, fittings, etc. on as-needed basis. Do not allow leaking to continue unattended.
5. Clean gutters on Bath House twice per year.

Sugar Grove Lodge (constructed circa 1979)

Life Safety:

1. Remove deadbolt from meeting room egress door and rear entrance door or replace hardware with interlocking deadbolt.
2. Replace (3) existing exit signs with new units having battery back-up, LED lamps and twin emergency light heads.
3. Install (1) new exit sign over exit door from meeting room.
4. Replace batteries, check and, if necessary, replace existing smoke detectors in each of the four sleeping rooms.
5. Install new smoke detector and carbon monoxide detector at front end of corridor between doors of two front sleeping rooms.
6. Replace batteries, check and, if necessary, replace existing smoke detector at rear end of corridor.
7. Install 12" high extension on the mezzanine guard rail to provide 42" high guard.
8. Install handrails on one side of stairs to mezzanine floor.
9. Install sign over each of the four sleeping room egress windows with instructions on how to open window.
10. Re-arrange beds in sleeping rooms to provide access to the egress windows.
11. Replace battery, check and, if necessary, replace the high-wall smoke alarm on mezzanine.
12. Re-install electrical panel board cover in mechanical room.
13. Install new smoke detector in single bed sleeping room and on ceiling of meeting room just outside this sleeping room.

Health Safety:

1. Replace exhaust fan in men's restroom and install duct through attic/roof with rain cap.
2. Replace the dishwasher in kitchen.
3. Replace ductless hood over range with new hood ducted to exterior.
4. Replace improper exhaust duct for one dryer and install new exhaust duct for second dryer. Currently, one dryer exhausts into room.

Accessibility:

1. Make the rear entrance door approach and threshold accessible.
2. Replace all door knobs with lever handles.
3. The sleeping rooms are inaccessible as doors are only 32" wide. Consider widening doors to two of four rooms to 36" wide.
4. The restrooms are not ADA accessible and to bring them into full compliance is economically infeasible.
5. Change faucet knobs on at least one lavatory in each restroom to lever handles.
6. Install handrail along new steps to front entrance door.

7. Install night light in hallway.

Repair/Replacement:

1. Replace the roof shingles.
2. Replace the flue pipe, flashing and roof cap for wood burning stove.
3. Replace defective light over women's restroom lavatories.
4. Replace missing and dislocated batt insulation above ceilings where left in disarray from previous alteration projects.
5. Remove extension cords in attic running from attic receptacles down into first floor space.
6. Install covers on open junction boxes in attic.
7. Replace missing rigid foam board insulation on rear wall and cover with cement board and flashing.
8. Check, repair or replace defective gutters and downspouts.
9. Correct circuit wiring to ceiling fan in meeting room causing breaker to trip.
10. Replace carpeting in the meeting room.
11. Repair or replace the range in kitchen.
12. Check/repair the warm air circulating fan and thermostat providing warm recovery air from high bay mezzanine space to the sleeping rooms.
13. Service, change filters and repair as necessary the thru-wall heating/air conditioning units in bedrooms and meeting room.

Maintenance:

1. Check and replace as needed batteries in all exit lighting fixtures and in all smoke detectors once per year.
2. Immediately service leaking plumbing fixtures, piping, valves, fittings, etc. on as-needed basis. Do not allow leaking to continue unattended.
3. Have building checked for insect infestation every two years, or sooner if evidence of problem. Obtain immediate service for infestation if needed.
4. Check and service exhaust fans in restrooms and kitchen every two years. Repair immediately when noted to not be working properly.
5. Clean gutters twice per year.
6. Have all fire extinguishers serviced and certified once per year.

Sugar Grove Annex: (installed by Robin Waddell)

Life Safety:

1. Test, service as needed, the existing fire alarm system; pulls, horn/strobe alarms and smoke detectors to assure proper operation.
2. Service, replace batteries and lamps as needed for proper operation of emergency lighting.
3. Service, replace batteries as needed for proper operation of exit lighting.

Health Safety:

1. No issues were noted.

Accessibility:

1. Replace all round door knobs with lever handles.

2. Restroom lavatories and toilets are accessible per former ADA regulations. Showers are not accessible.
3. Compliant ramp provides accessibility to entrances. Install a flat concrete stoop at base of ramp and improve gravel approach to ramp.
4. Entrance doors require changing knobs to lever handles, otherwise, the entrance doors are compliant.
5. Replace faucet knobs on lavatory in men's restroom with lever handles.

Repair/Replace:

1. Repair the damaged electrical service feeders to Annex; refer to discussion under Item 1 under Electrical Infrastructure. Currently one leg of 3-phase service is dead, not all circuits in the Annex panelboard are powered and heating/air conditioning units will not operate.
2. Repair roof to eliminate leak.

Maintenance:

1. Service, change filters and repair as necessary the heating/air conditioning units.
2. Check and service the restroom exhaust fans every two years.
3. Check and replace as needed batteries in all exit lights, emergency lights and smoke detectors once per year.
4. Have all fire extinguishers serviced and certified once per year.
5. Service leaking plumbing fixtures, piping, valves, fittings, etc. on immediate as-needed basis. Do not allow leaking to continue unattended.

Sugar Grove Ridge Storm Shelter: (Constructed circa 1998)

Life Safety

1. No issues were noted.

Health Safety:

1. Check and assure proper operation of exhaust system for all three toilet rooms.
2. Install fire extinguisher in shelter.

Accessibility:

1. Accessibility is non-issue for Hogan and cabin campers.

Repair/Replacement:

1. No problems were reported.

Maintenance:

1. Clean gutters twice per year.
2. Service leaking plumbing fixtures, piping, valves, fittings, etc. on immediate as-needed.
3. Have fire extinguisher serviced and certified once per year.

Chalets: (constructed circa 1982)**Life Safety:**

1. Each second floor bedroom has one emergency egress window. Repair or replace all existing windows where lower (egress) sash cannot be opened or will not stay open. Approximately 60% of the (15) windows need repair/replacement.
2. Each chalet has one emergency ladder for egress through the bedroom window. Since hallway is unprotected, provide (10) additional ladders so each bedroom has a ladder.
3. Each bedroom in all five chalets have working smoke detectors. Each second floor hallway in all five chalets have a smoke detector and carbon monoxide detector. The CO detectors should be relocated to the first floor to be lower than the second floor level. Replace battery, check and, if necessary, replace (2) hallway smoke detectors not currently working.
4. Check batteries in smoke detectors at bottom of stairs in all five units, test and replace if necessary.
5. Each chalet has two bedrooms where furniture must be re-arranged to provide easy, quick access to egress windows.
6. Add 6"± extension to top of elevated deck guard rails to provide 42" high deck guards.

Health Safety:

1. Install new exhaust fan in first floor bathrooms in Chalets 4 and 5.
2. Replace refrigerator in Chalet 4.
3. Replace defective flooring in bathrooms; eliminate gaps and cracks impossible to clean.
4. Recaulk joints around showers, tubs, sinks and toilets.

Accessibility:

1. In general it is technically and economically infeasible to make the chalets compliant with ADA standards.
2. Recommend making the front entrance approach and door of Chalet 4 accessible.
3. Change the round knobs on entrance doors, bathrooms and bedrooms to lever handles.

Repair/Replacement:

1. Replace glazing in windows with failed seals. Most dining room and several bedroom window units are filled with moisture.
2. Replace deteriorated sub-floor in kitchens and bathrooms and the flooring in those rooms requiring new sub-flooring. (Bathroom in Chalet 3 is particularly bad)
3. Replace carpeting in all units.
4. Replace deteriorated deck boards.
5. Repair/replace oven handle on range in Chalet 1.
6. Repair cracks in drywall ceiling in living area in Chalets 4 and 5.
7. Have all chalets checked for termite and insect infestation. Three units show signs of termites. Chalets confirmed to be infested should immediately be treated.
8. Lower grade along front side of several Chalets. Provide a minimum of 6" gap between finished grade and bottom of wood siding.
9. Check all gutters and downspouts; leaking joints, sagging gutters, loose connections and downspouts disconnected from underground storm lines need to be corrected.
10. Replace rotted and deteriorated wood trim and siding at base of several units.

11. Install new batt insulation between first floor joists in crawl spaces of all units where missing or in poor condition.
12. Check all roofing and flashing; replace defective shingles and flashing.

Maintenance:

1. Check and replace as needed batteries in all smoke and CO detectors once per year.
2. Have all fire extinguishers serviced and certified once per year.
3. Clean gutters twice per year.
4. Service, change filters and repair as necessary the thru-wall heating/air conditioning units in stairway landings once per year.
5. Check and service as needed all restroom exhaust fans every two years.
6. Have all chalets checked for insect infestation every two years or sooner if evidence of problem. Obtain immediate service for infestation if needed.
7. Service leaking plumbing fixtures, piping, valves, fittings, etc. on immediate as-needed basis. Do not allow leaking to continue unattended.

Family Camping Circle/Bath House: (Constructed Circa 1967)

Life Safety:

1. Install permanent utility pole near service drive and elevate overhead power lines which currently are within inches of the metal roof.
2. Change receptacles in restrooms to GFI devices.

Health Safety:

1. Replace the urinal in men's restroom.
2. Replace one toilet fixture in men's restroom.
3. Install exhaust fan in each restroom.
4. Replace the water heater; demand exceeds capability of existing units.
5. Apply non-slip coating on floor slabs in restrooms.

Accessibility:

1. Accessibility is non-issue for RV and trailer campers.

Repair/Replacement:

1. Repair/replace non-working receptacles at campsites.
2. Install pulls on recently installed screen doors at restroom entrances.
3. Paint the recently installed screen doors.
4. Repair leaks in piping, valves and fittings.

Maintenance:

1. Service leaking plumbing fixtures, piping, valves and fittings etc. on immediate as needed basis.
2. Check and service as needed the restroom exhaust fans every two years.

Ranch House:

Life Safety:

1. Install new smoke detectors in first and second floor stairway halls.
2. Cease using the back second floor bedroom for sleeping. This room has low headroom, changes in level and a non-compliant emergency egress window.
3. Install carbon monoxide detector in first floor bedroom hall.
4. Install new smoke detectors in (3) bedrooms.
5. Service, replace battery in existing smoke detector in one first floor bedroom, check for proper operation.
6. Rearrange furniture in one second floor bedroom to provide clear access to emergency egress window.
7. Install exit lights at both first floor entrance doors.
8. Install emergency lights in first and second floor hallways.

Health Safety:

1. No issues were noted.

Accessibility:

1. None of the entrances, interior circulation, restrooms or bedrooms are accessible. Compliance with ADA regulations is technically and economically infeasible.
2. Consider changing all door knobs to lever handles.

Repair/Replacement:

1. Replace the roofing;
2. Repair large gaps in roof fascia board. Currently birds and critters can enter attic.
3. Repair/eliminate damage at top of foundation wall allowing critters to enter basement.
4. Repair ceiling damage from roof leaks.
5. Service furnace and condensing unit, change filter.
6. Install new gutters and downspouts.

Maintenance:

1. Have building checked for insect infestation every two years, or sooner if evidence of problem. Obtain immediate service for infestation if needed.
2. Check and replace batteries as needed in all smoke and CO detectors once per year.
3. Have fire extinguishers serviced and certified once per year.
4. Clean gutters twice per year.
5. Service, change filter and repair as necessary the furnace and condensing unit once per year.
6. Check and service restroom exhaust fans every two years.

Ranch House Annex: (Installed by Robin Waddell)

We were unable to gain access to the interior of the two units. Reportedly, these units were not used last camping season. In general, these two buildings are similar to Sugar Grove Annex. One building contains large, accessible men's and women's showers and restrooms. The second building contains separate men's and women's dorm style sleeping rooms. Sloped concrete walks and wood ramps provided ADA compliant access to the entrance doors.

Staff House:

In general, this house is in poor condition inside and out. There are numerous gaps in soffits and fascias allowing entry by animals, interior is infested by bees, the bathroom and kitchen are in poor condition, all but one bedroom lack privacy. If this house is needed for the camping programs, it should be extensively remodeled. A detailed assessment for this study was not worthwhile.

INFRASTRUCTURE ASSESSMENT

Dam:

The dam is under the jurisdiction of the Ohio Department of Natural Resources. This department periodically inspects and evaluates the dam and issues their findings. The most recent inspection was conducted May 29, 2013, and a report issued to Woodland Altars on September 17, 2013. This report lists several required repairs, maintenance and monitoring items:

1. Remove trees and brush encroaching on the right downstream groin.
2. Remove the small trees at the emergency spillway pipe outlets.
3. Repair the bare spots on embankment with grass cover.
4. Monitor the condition of the trash rack and antivortex plate for further deterioration.
5. Remove debris from the emergency spillway pipes.
6. Monitor the spillway conduit for further deterioration. Repairs may be needed if this problem worsens.
7. Owner shall prepare an Emergency Action Plan and submit for approval.
8. Owner shall prepare an Operation, Maintenance and Inspection Manual and submit for approval.

Electric Service:

In general, the service to all buildings and facilities is in good condition. Recent upgrades made by Robin Waddell were in compliance with NEC, were installed under permits and were inspected by the State. Three issues need to be addressed:

1. Correctly repair the severed underground 3-phase service cable to the Ranch House Annex, using underground water-tight splice kit on each wire. Incorrect repair is cause of one dead leg of 3-phase service to Sugar Grove Annex.
2. The 3-phase electrical service panel cover near amphitheater is not locked and can be easily opened. Provide secure, locked panel cover.
3. Change breaker at Program Building to match feeder size.

Septic Systems:

System for Heritage Lodge and Pool:

This system has a large sand filter bed constructed circa 1967. Although reports of washout at one corner occurred about 25 years ago, there is no damage apparent at this time. The discharge pipe from under sand drain line is intact and discharge is clear and odorless. The service contractor reports there are no known problems with the system. The top two courses of concrete block retaining walls between stepped down beds are loose, some blocks dislodged. The beds are currently overgrown with brush and small trees which must be cleared.

System for Sugar Grove Lodge:

This is an evaporative leaching system constructed circa 1979 and located in lawn between dam and Rt. 241. The bed appears in excellent condition. The service contractor reports no known problems with this system.

System for Sugar Grove Ridge Shelter:

This system is simply a precast holding tank installed circa 1998 and is periodically pumped and reported by Service Contractor to be in good condition.

System for Family Camping Circle/Chalets:

This system was installed circa 1967, has large tank just below camping circle. No plans for this system were located, but presumably it has a sand filter bed similar to the system for Heritage Lodge. The tank and bed area are overgrown with brush and vines which must be cleared. Two PVC sanitary pipes were damaged and repaired when the new water line was recently installed. Because the existing sanitary lines were very shallow the new water line crossed under, rather than over the sanitary. Reportedly, the repair to the PVC pipe used solvent welded joints. These crossovers should be uncovered and a twenty foot 6" PVC sleeve placed over the sanitary line. The new water pipe has joints at 20 feet on center. Reportedly, no joint is closer than five feet to the crossover. The service contractor reports no known problems with this system.

System for Ranch House/Annex:

This aeration system was installed during time Roger Crusier lived in Ranch House. The service contractor has replaced mechanical equipment on this system and reports no known problems.

System for Staff House:

Age of this system is unknown. Presumably it has a leaching bed. Service Contractor reports no known problems with this system.

Reports that the State/County Health Departments will be initiating inspections and evaluations of all septic systems were discussed with Adams County Health Department Sanitarian. Unless mandated by the State, Adams County has insufficient manpower and budget and will make no inspections in the foreseeable future.

Water Service

Following persistent and significant leaks in the domestic water distribution system, a major part of the distribution piping was replaced in earlier this year with 2" diameter, gasketed joint SDR 21 PVC pipe rated for 160 psi. According to Adams County Regional Water, this pipe is used in the County's public mains. New pipe begins at the manhole north of the camp entrance with one new branch line crossing Sugar Grove Ridge between the Lodge and Annex, crosses the stream at head of the lake and terminates at Heritage Lodge. A second new branch parallels the road to Family Camping Circle entrance and branches into two lines, one ascending the hill to the Chalets which terminates at Chalet 5, the second parallel to the south side of camping loop drive and terminating at the highest camp site on east side of loop.

There are several new water line cross-overs with existing sanitary lines; one with Heritage Lodge lateral, one with Sugar Grove Annex lateral, one with the Chalet lateral, one with the Camping Circle bathhouse lateral and several with individual camp site laterals. At most crossovers, the waterline is above the sanitary line. At the Camping Circle, two sanitary lines were so shallow the 30" deep water line crosses under the sanitary laterals. At these crossovers the PVC sanitary lines were damaged and spliced with solvent welded joints.

In these locations, it is recommended the sanitary lines be uncovered for length of 10'-0" each side of cross-over and a 20'-0" section of 6" PVC sleeve placed over the sanitary line.

New accessible cast iron meter pit with shut-off valves and drains for winterizing were installed at each building served by the new water lines. No backflow preventors were installed within the new distribution system. Existing branch feeders to the pool, Sugar Grove Lodge, Annex and Ridge shelter and Ranch buildings were not replaced but connected to the new lines at its closest proximity.

It is recommended a backflow preventor be installed on branch feeder to each facility to prevent cross-contamination through the main feeders. This is required for all new installations.

Camp Roads/Drives

In general, the roads are in reasonably good condition. The asphalt pavement for main drives need repair in several areas; between Heritage Lodge parking and entrance walk to pool, at the main entrance off Rt. 241 and the fork in main entrance drive, along the drive before fork for picnic area drive and between the forks for picnic area and the Camping Circle drives. Portions of these drives have lost enough asphalt they are resorting to gravel. The deteriorated areas near main entrance could be classified as potholes. The deteriorated areas near Heritage Lodge are largely due to erosion from poorly graded area along south side of the drive.

It is recommended to regrade along the south side of drive at Heritage Lodge to direct water away from rather than along the edge of drive and to restore the stone base and asphalt pavement. It is also recommended to restore the asphalt pavement on drive between camp entrance and the fork to Camping Circle.

Gasoline Tank

An abandoned underground gasoline tank and above ground gasoline pump is located adjacent to the White Pine Classroom Building at the Ranch. According to Roger Cruser this pump was used for camp vehicles. Apparently, no steps were taken to empty the tank or decommission the system. It is recommended the District employ an Environmental Consultant to sample the soil and advise on methodology for removal of the tank and pump.

BUDGET FOR REPAIRS & IMPROVEMENTS

BUILDINGS:

Life Safety:

Heritage Lodge:	\$ 13,500.00
Swimming Pool/Bath House:	\$ 500.00
Sugar Grove Lodge:	\$ 2,500.00
Sugar Grove Annex:	\$ 500.00
Sugar Grove Ridge Storm Shelter:	-
Chalets:	\$ 7,500.00
Camping Circle Bath House:	\$ 1,000.00
Ranch House:	\$ 1,500.00
Ranch House Annex:	\$ 500.00
Staff House:	<u>\$ 1,500.00</u>
Sub-total	\$29,000.00

Health Safety:

Heritage Lodge:	\$ 8,500.00
Swimming Pool/Bath House:	\$ 7,500.00
Sugar Grove Lodge:	\$ 1,500.00
Sugar Grove Annex:	-
Sugar Grove Ridge Storm Shelter:	\$ 500.00
Chalets:	\$ 2,500.00
Camping Circle Bath House:	\$ 3,000.00
Ranch House:	-
Ranch House Annex:	-
Staff House:	<u>\$ 5,000.00</u>
Sub-total	\$28,500.00

Accessibility:

Heritage Lodge:	\$ 4,000.00
Swimming Pool/Bath House:	-
Sugar Grove Lodge:	\$ 3,500.00
Sugar Grove Annex:	\$ 1,000.00
Sugar Grove Ridge Storm Shelter:	-
Chalets:	\$ 3,000.00
Camping Circle Bath House:	-
Ranch House:	\$ 1,000.00
Ranch House Annex:	-
Staff House:	-
Sub-total	<u>\$12,500.00</u>

Repair/Replacement:	
Heritage Lodge:	\$ 51,500.00
Swimming Pool/Bath House:	\$ 6,500.00
Sugar Grove Lodge:	\$ 22,000.00
Sugar Grove Annex:	\$ 500.00
Sugar Grove Ridge Storm Shelter:	-
Chalets:	\$ 19,500.00
Camping Circle Bath House:	\$ 1,500.00
Ranch House:	\$ 9,500.00
Ranch House Annex:	\$ 1,000.00
Staff House:	<u>\$ 35,000.00</u>
	Sub-total
	\$147,000.00
Total for Building Repairs and Improvements: \$217,000.00	

INFRASTRUCTURE

Repairs/Improvements:	
Dam:	\$ 1,000.00
Electric System:	\$ 2,000.00
Septic Systems:	\$ 1,500.00
Water Service:	\$ 12,000.00
Roads/Drives:	<u>\$ 11,000.00</u>
Total for Infrastructure Repairs & Improvements	\$ 27,500.00

ANNUAL BUDGET FOR MAINTENANCE

Routine Maintenance:

Heritage Lodge:	\$ 3,500.00
Swimming Pool/Bath House:	\$ 2,000.00
Sugar Grove Lodge:	\$ 1,000.00
Sugar Grove Annex:	\$ 1,000.00
Sugar Grove Ridge Storm Shelter:	\$ 500.00
Chalets:	\$ 3,000.00
Camping Circle Bath House:	\$ 500.00
Ranch House:	\$ 1,000.00
Ranch House Annex:	\$ 500.00
Staff House:	\$ 1,000.00
Dam:	\$ 1,000.00
Septic Systems:	\$ 1,500.00
Water Service:	\$ 2,000.00
Roads and Drives	<u>\$ 2,000.00</u>
Total Annual Budget	\$20,500.00