

Little White Schoolhouse
26951 Barkley Road
Conifer, Colorado

**Historic Structure Assessment
and
Preservation Plan**

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Completed by the Center of Preservation Research

**College of Architecture and Planning
University of Colorado Denver**

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1. PART I. INTRODUCTION

1.1. RESEARCH BACKGROUND/PARTICIPANTS

This historic structure assessment and preservation plan is based on a series of visits to the buildings during which the conditions of major components of the buildings were observed and their physical conditions and problems noted. The on-site observations occurred from September 2013 – November 2013. Information obtained during the on-site observations is organized by major building components as follows: site, foundations, building structural system, building envelope – exterior walls, building envelope – roofing and waterproofing, building envelope – doors and windows, interior finishes, mechanical systems and electrical systems.

The on-site observations and development of the historic structure assessment and preservation plan were completed by Beth Glandon, Master's candidate in the Master of Science of Historic Preservation at the University of Colorado Denver under the direction of Melanie Short, registered architect and the Assessment Coordinator at the Center of Preservation Research (CoPR) at the University of Colorado Denver and Kat Vlahos, Principal Investigator and the Director of CoPR. Further research and information was provided by Brendan Willits, property manager at Jefferson County Public Schools and Carla Mink, member at large of the Board of Directors of the Conifer Historical Society and Museum (CHSM) and former school teacher at the Little White Schoolhouse and Suzi Morris, President of CHSM. Information relating to dates of construction and changes were obtained from newspaper articles obtained from the online Colorado Historic Newspapers Collection and the National Register Nomination prepared by Kirsten Gravdahl. This assessment was funded by grant number 13-HA-033 from the State Historical Fund. The building was observed during periods of warm sunny weather, after a snow event and during an overcast day with intermittent rain.

1.2. BUILDING LOCATION

The building is located north of the junction of Highway 73 and US Highway 285 in unincorporated Jefferson County. The building's address is 26951 Barkley Road, Conifer, Colorado, 80433.

Conifer, in Jefferson County, Colorado, began as Bradford Junction. Bradford Junction was the junction of the Bradford Road, Mount Vernon Road, and the Denver and South Park Wagon Road, all stage lines between different mining areas and Denver. Bradford Junction started as a stage stop around 1860 with a small hotel and restaurant. Robert Bradford had 320 acres in the area and the stop took on his name. The community grew and the town added a post office in 1865 at which time the area was renamed Hutchison, and shortly after, Hutchinson. In 1868 the Junction School District became Jefferson County School District No. 9. By 1881, the F. V. Hayden Atlas of Colorado listed the area as Junction. The Hutchinson School, located one-half mile south of the Bradford Junction intersection, was constructed in 1885. This was the first school in the area. The name of the post office changed to Conifer, in honor of the forests in the area, in 1894. Around the turn of the century, the now named Conifer School District No. 9 purchased

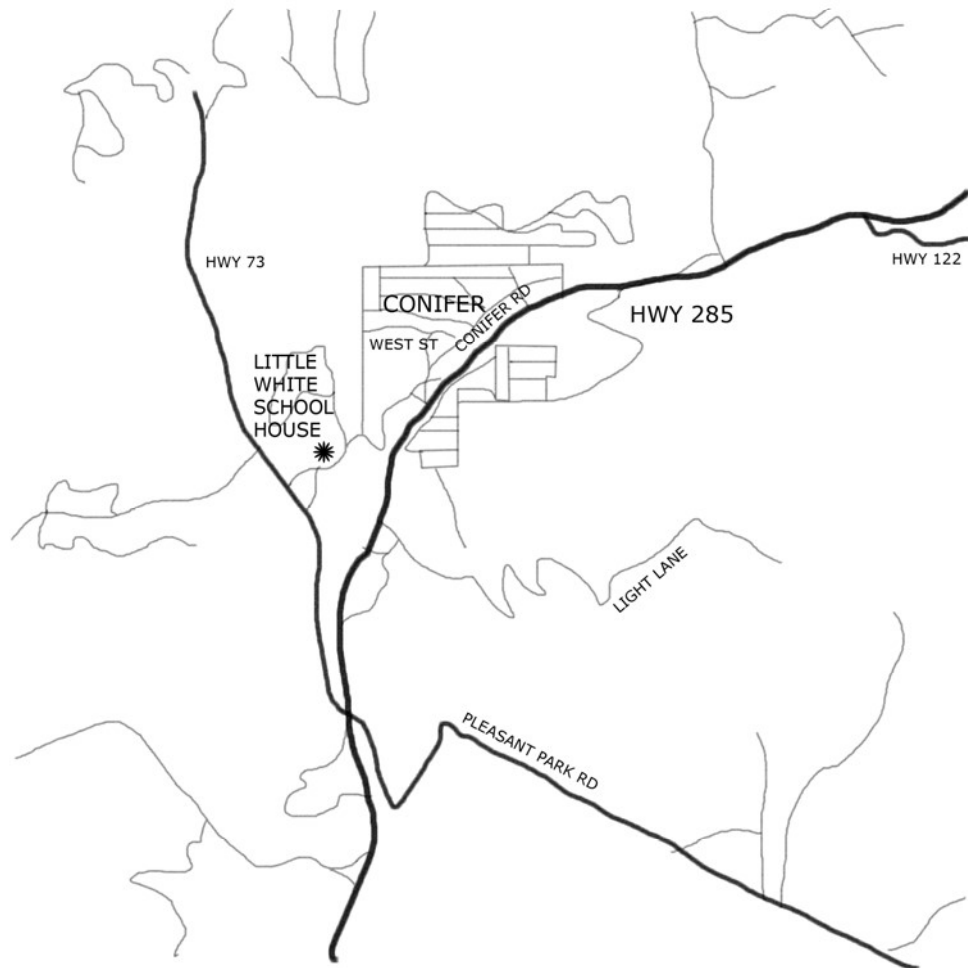
the Kemp church to replace the first school. This building was located one-half mile south of Hutchinson and was known as the Junction School. In 1910, the population of Conifer was 40 according to the Colorado State Business Directory. By 1915 the population had risen to 125 and by 1925 it was up to 150. This population was able to support a larger and more centralized school. A vote was held in 1922 for the new schoolhouse to be located at “the Junction” on land owned by J.J. Mullen at the time.

1.3. LEGAL DESCRIPTION

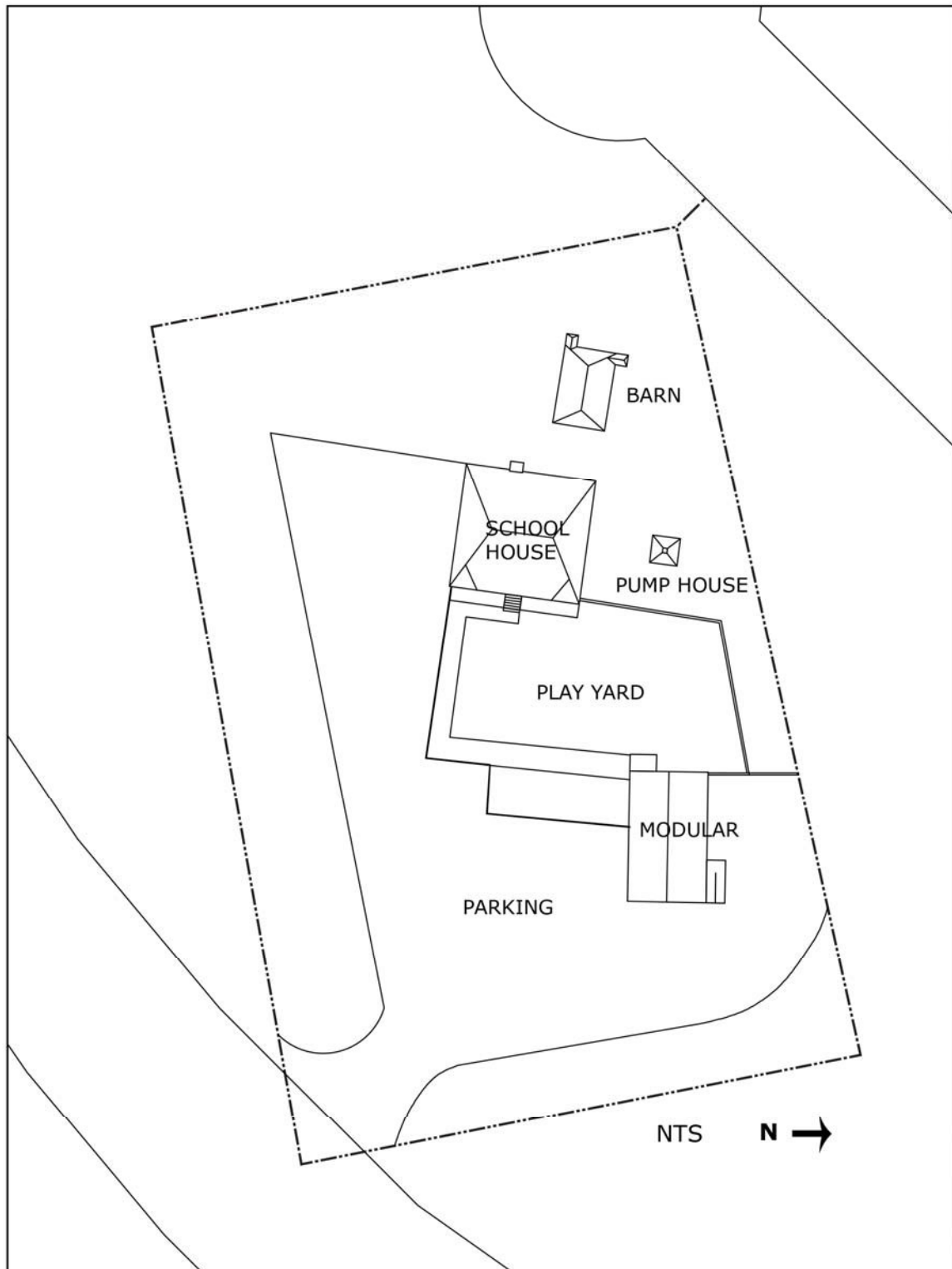
The legal description for the property was obtained from the Jefferson County Clerk and Recorder website.

The building is located in the northwest quarter (NW 1/4) of Section Fourteen (14), Township Six (6) South, Range Seventy-one (71) West of the sixth principal meridian.

1.4. VICINITY MAP



1.5. EXISTING SITE SKETCH



2. PART II. HISTORY AND USE

2.1. ARCHITECTURAL SIGNIFICANCE AND CONSTRUCTION HISTORY

2.1.1. History

The Conifer Junction Schoolhouse opened in 1923, replacing the Kemp church as the local school building.¹ A year earlier, Conifer School District (District No. 9) decided a new school was necessary and approved funds to build one. John J. Mullen, owner of the nearby Junction Ranch and nephew of well-known Denver philanthropist John Kernan Mullen, loaned to the district the land on which the school was built.² The exact terms of the loan are unknown. Conifer Junction Schoolhouse, the first purpose built school in Conifer, opened its doors on February 12, 1923.³

There is little documentation surrounding the construction of the schoolhouse. It appears that it was built in approximately six months, with work beginning after funds were approved in the summer of 1922 and wrapping up in the first months of 1923.⁴ Area lore says that a local man, George Green, was instrumental in the construction of the school. No documentation supporting this claim has been found.

As there was no running water at the schoolhouse, water for drinking and washing was carried to the schoolhouse from the Civil War well at Bradford Junction, and privies were located in an unknown location on the property. In the 1930s, the barn located to the west of the schoolhouse was built. The exact date of construction is unknown. Initially the barn was used for the horses and mules that students rode to school, and later it was used as a storage shed. The barn has two privies attached to it, one for boys and one for girls. These likely replaced the earlier privies. J.H. Brubaker, who had purchased the Junction Ranch from John J. Mullen in 1942, deeded the property to the school district in 1946.⁵

Like other one-room schoolhouses, a single teacher at a time taught at the school for most of its existence. It was only in 1953 when a second teacher arrived to handle the large number of students. The students were divided between the teachers, who continued to teach in the one room. The school functioned as a one-room schoolhouse until after consolidation when Jefferson County decided that a larger schoolhouse was needed due to population growth in the area. West Jefferson Elementary opened in 1955, northeast

¹ Phebe Granzella, "A Century of Jefferson County Mountain Area Schools," Jefferson County Historical Commission, 1993, page 30.

² Granzella, page 31.

³ Colorado Transcript, 22 February 1923, page 6. From www.coloradohistoricnewspapers.org.

⁴ Colorado Transcript, 18 January 1923, pg 7. From www.coloradohistoricnewspapers.org.

⁵ Kirsten Gravdahl, Conifer Junction Schoolhouse National Register Nomination, page 10.

of the Conifer Junction Schoolhouse. Shortly after opening, the school district found that the new school was not large enough, and used Conifer Junction Schoolhouse as an overflow classroom.⁶

In 1965 the Jefferson County School District converted the Conifer Junction Schoolhouse to a preschool, thereafter it was called the Little White Schoolhouse. A wall dividing the main floor of the school into two rooms was added in 1980. While in use as a preschool there were two teachers, and often an assistant for each room. During this time, the schoolhouse also functioned part of the week as a library, with the north cloakroom housing the books. A drop box was added to the exterior door of the north cloakroom to allow for book returns.⁷

The pump house, just north of the schoolhouse, was built in 1990 to surround an existing concrete slab and pump. The modular building was moved on site in 1996 to accommodate children with disabilities.⁸

The schoolhouse housed the preschool until 2012 when it closed and the building was deemed surplus. Late in 2012, the property was sold for a very small sum to the Conifer Historical Society and Museum (CHSM).

2.1.2. Architectural Description

The Conifer Junction Schoolhouse is a single detached building with a rectangular plan. The schoolhouse is one story with a partial garden level basement and a partial crawl space. The exterior wall material is horizontal wood siding with white wooden trim. Both siding and trim have been painted white. The hipped roof has projecting eaves with exposed rafter tails. Two cloakrooms, one on either side of a wide covered porch, are found on the east (main) elevation. *[Photo 1]* Each cloakroom has its own low hipped roof. A stone full-height exterior chimney is centered on the west (rear) elevation of the building. *[Photo 2]*

The window openings on the main floor are flat across the top with plain molding surrounds. These windows are wood double hung. The main entrance is located in the center of the porch on the east elevation. A secondary door is located at the west end of the north elevation. *[Photo 3]* Each cloakroom has two doors, one that leads to the wide front porch, and one that enters into the classroom. An interior door at the southwest corner of the classroom leads down into the basement. An exterior door on the south elevation leads directly into the basement. *[Photo 4]* The basement level of the schoolhouse has one fixed and one casement window on its south elevation.

The first floor contains one large classroom and two cloakrooms. A small sink and cabinet are located along the west wall of the classroom, just inside the door leading to the basement.

⁶ National Register Nomination, page 13.

⁷ National Register Nomination, page 14.

⁸ National Register Nomination, page 4.

The basement contains a central room, a utility room, a storage room, and boys and girls restrooms. A small storage room, located between the restrooms, reportedly once held coal. The central room, which once held the furnace, now contains a utility sink and cabinetry. The crawl space access is located at the northeast corner of the central room, along the north wall of the basement.

2.1.3. Preservation Background

The Conifer Junction/ Little White Schoolhouse was in continuous use until 2012 when the Jefferson County School District deemed it surplus and it was transferred to CHSM. It was placed on the National Register of Historic Places on February 10, 2014. The schoolhouse is also referenced in Jefferson County's *Conifer/285 Corridor Area Community Plan* as a known historic site. The site number is 5JF.5107. Conifer Junction Schoolhouse is locally significant under Criterion A for Education, for its use and development as a one-room schoolhouse in rural Colorado. It is also significant under Criterion A for Social History as it was used for many social events in the town including an entertainment venue, for dances and box socials. The schoolhouse is also locally significant under Criterion C for Architecture as a surviving example of one-room rural schoolhouse architecture. The Conifer Junction Schoolhouse meets the registration requirement of the schoolhouse property type as defined in the Multiple Property Documentation Form (MPDF) Rural School Buildings in Colorado. The period of significance for education is 1923-1963 as the building was used as a one-room schoolhouse throughout the entire period. The period of significance for social history is 1923-1955, at which point West Jefferson Elementary School was built and Conifer Junction was no longer the center of the social community. The period of significance for architecture is 1923-1963 since the site was in use as a rural schoolhouse throughout the entire period, the cut off is the 50 year timeframe from 2013.

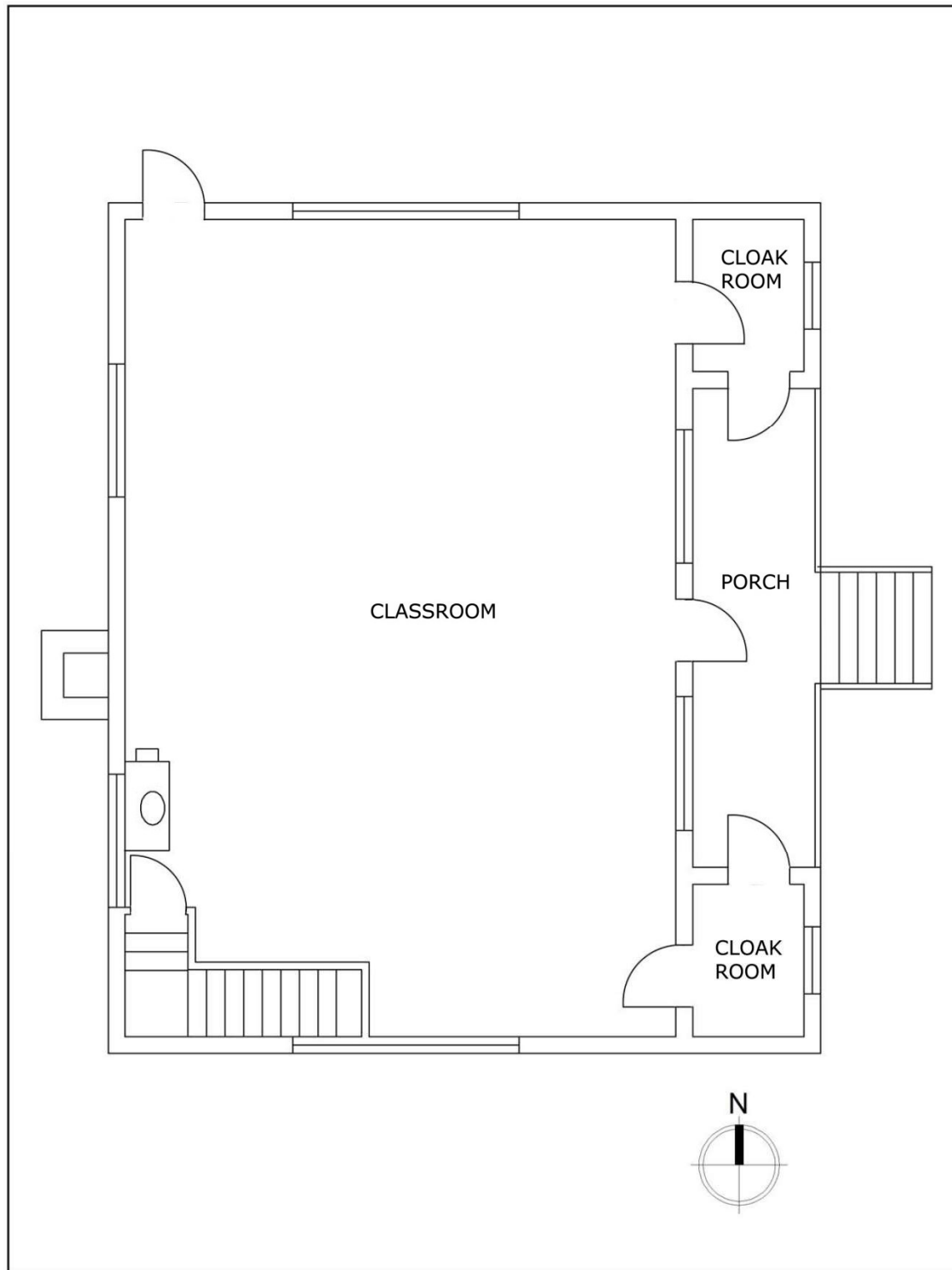
The Conifer Junction School House is locally significant under Criterion A for Education from 1923 until 1963. The schoolhouse opened in 1923 and was used continually as a location for education through 1963, with 1963 at the 50-year cut-off from 2013. It is an excellent example of the one room schoolhouse located in many rural areas of the country. Many have since been demolished, or changed beyond recognition, but the Conifer Junction Schoolhouse sits on its original site and has not been altered much. Conifer Junction ran as a one-room, one-teacher schoolhouse until the 1953 when there were too many students for the one teacher, so a second teacher was added, the two teachers and class shared the single room until West Jefferson Elementary was built in 1955, just up the hill from Conifer Junction. This schoolhouse is a step in the development of formal education in rural areas of Colorado. It shows that the one-room rural schools prevailed in Colorado until mid-20th century when populations grew too large.

The Conifer Junction School House is locally significant under Criterion A for Social History from 1923 until 1955. This time period goes from when the school was built up until West Jefferson Elementary School was built and Conifer was no longer the single public building to be used by the community. The school house functioned as various community needs over the years of its use, including a meeting place for the Conifer

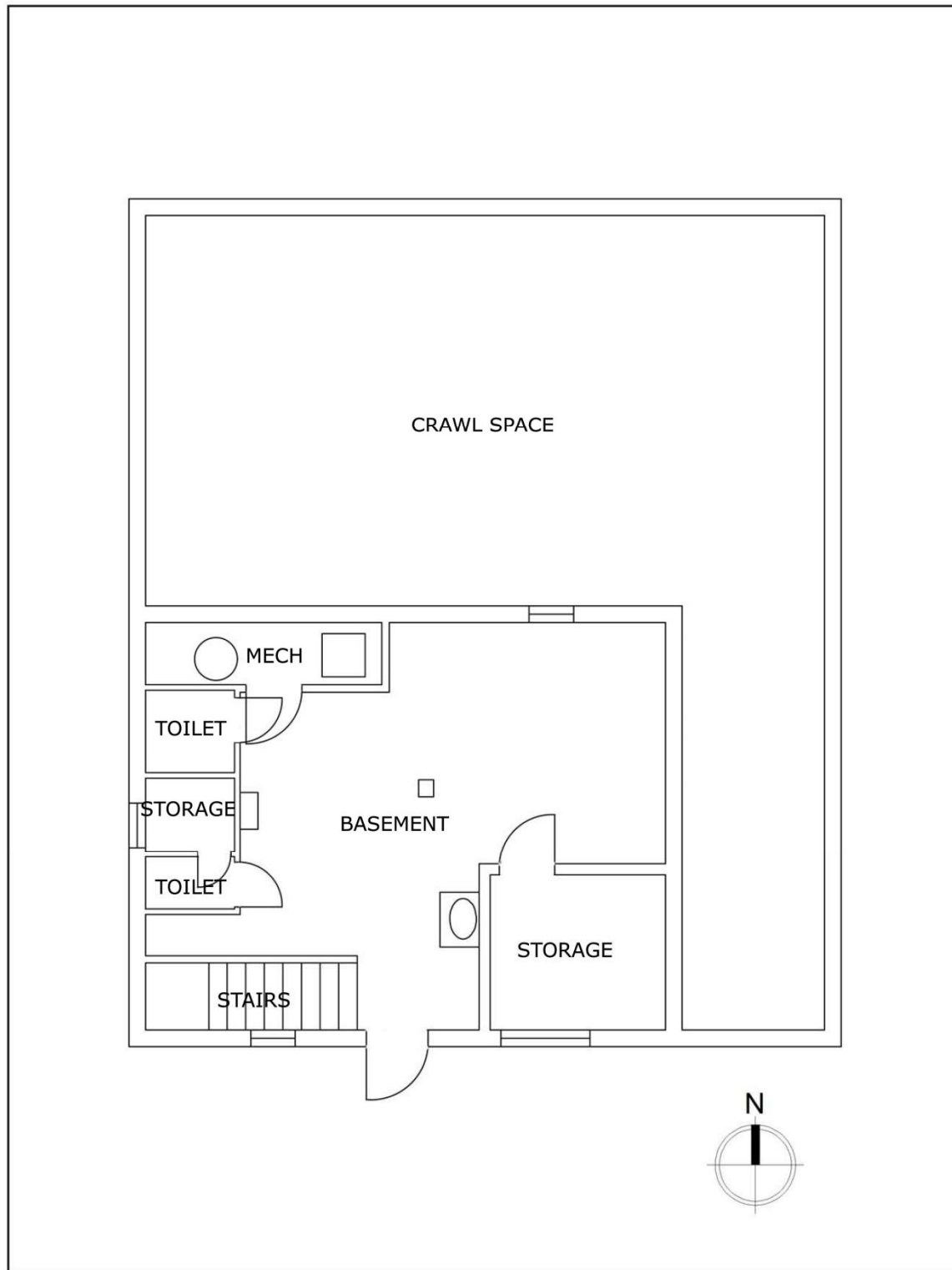
Civic Club, location of boxed lunch socials, picnics, dances, an entertainment venue and other club meeting spots. Newspaper announcement from the 1920s describe successful events held at the schoolhouse, including a “quite well attended” dance on Saturday night from an article in the Colorado Transcript from October 2nd, 1924. This article mentioned another dance coming up on the 11th of October the same year.

The Conifer Junction School House is locally significant under Criterion C for Architectural significance, as a well preserved one-room schoolhouse in Jefferson County. It is an unusual example of a one-room schoolhouse with the cloak rooms to either side of the porch and an entry door in between directly into the school. Most rural school buildings have a single front entry door into the main room, or through the cloak room/s Conifer is unique with the entry porch and three doors that lead into the main room. Conifer Junction is also unique in that it was built in a time period when most other school buildings were built with a bell tower, though it has none, and no indication that there was one in the past. The one-room school house is common in the rural areas of the country, though Conifer Junction is wider than it is long, unlike most other schoolhouses of the same time period. The building has been changed very little, and sits on its original site, along with three other buildings, one of which is also historic.

2.2. EXISTING FIRST FLOOR PLAN



2.3. EXISTING BASEMENT PLAN



2.4. PROPOSED USE(S)

CHSM acquired the Little White Schoolhouse in 2012. The historical society plans to open the school for tours, events and a public museum. The building will be used as a museum that will house artifacts, but the building itself will not be a museum piece. Tours and events will be held in the main space of the schoolhouse. Permanent exhibits will be in keeping with the history of the schoolhouse and the community of Conifer. The Little White Schoolhouse will be home to the society's now-traveling exhibit, which is mostly made up of old photographs of early Conifer. The collection also has local artifacts such as farm equipment that area residents have donated, and a bound collection of 1800s and early-1900s Rocky Mountain News editions from resident Norm Meyer. It will be a place where the community can have archives of photographs that will share the legacy of this area. The museum will accept local historical items, but the society will need to develop an acquisition policy first because space is limited at the Little White Schoolhouse. The schoolhouse will also house the office of the historical society which has no permanent staff. Appropriate collections for the schoolhouse will not require specialized storage in terms of temperature and humidity. If anything in the collection does require these types of storage requirements, there are cabinets and specialized storage units that can provide these needs without impacting the overall building. There is also limited collections storage, which will need to be organized to provide maximum space. The accessibility of the building will be the largest challenge for the building, followed by providing greater sustainability and lowering operating costs for the Owner.

In terms of work within the building to allow for this new use, the Owner has a desire to remove a few of the items that were added during the preschool phase of the building. These items include the stair case enclosure wall and door, a low piece of casework with a sink and drinking fountain at toddler height and carpeting installed over the original wood flooring. During this investigation, it was unable to be determined what the original configuration of the stair knee wall/ railing was. There is no ghosting on the wall which would indicate a profile of a knee wall or a railing, and the use of a stud finder was unable to determine any remnants of either within the wall assembly. The current stair enclosure is believed to date from the conversion to the preschool in 1965, which puts it outside the period of significance and therefore can be removed. Demolition may clear up the knee wall or railing debate, but at this time, either one could be considered an appropriate enclosure for the stair opening as long as it is designed appropriately and with sensitivity to the remaining original materials. The low casework, sink and drinking fountain do not date to the period of significance of the building and can be removed. The same would hold true for the carpeting.

The Barn would require significant upgrades to become an occupied space. The best use is for storage, which would not require installation of utilities or upgrades to the structure. If the building needs to be used for occupancy, a structural engineer will need to be consulted to bring the building into compliance.

3. PART III. STRUCTURE CONDITION ASSESSMENT

Definitions

This building condition assessment makes use of terms concerning the condition of building components which are defined as follows.

Good Condition: An element, component or system is evaluated in good condition when it is intact, structurally sound or functionally operational and performing its intended purpose. There are few or no cosmetic defects. The element needs no specific repair and requires only minor or routine maintenance.

Fair Condition: An element, component or system is evaluated in fair condition when there are signs of wear, fatigue or deterioration exceeding nominal expectations, though the element is generally sound or functionally operational and performing its intended purpose. There may be failure of a sub-component of the element or system. Replacement of up to 25 percent of the element or replacement of defective subcomponents may be necessary.

Poor Condition: An element, component or system is evaluated in poor condition when it is no longer performing its intended purpose. Deterioration or damage affects more than 25 percent of the element and simple repairs cannot be justified or are not expected to be effective. The element may show signs of imminent failure or breakdown. Major repair or replacement may be required.

3.1. SITE

3.1.1. Associated Landscape Features

The building is located on a one-acre lot in the unincorporated community of Conifer in Jefferson County, Colorado. The site is up the hill approximately 400 yards from Junction Corner, an early settlement and the beginnings of the town of Conifer. *[Photo 5]* Residential properties surround the site. The boundaries of the property sit slightly askew, angled slightly southwest of the north/south line. The site slopes overall from the north to the south. *[Photo 6]* The site has a steep slope beginning from the southern edge of an asphalt-paved parking area further described below down to the southwest corner of the site. *[Photo 7]* On this hillside are shrub brush, tall grasses, wild flowers and coniferous trees. Specifically, ponderosa pine, western wheat grass, wild rose, thistle, ragweed, sulfur flower, potentilla, cinquefoil, mullein, milkweed, blue bells, bindweed and yarrow are all present. Wild roses are growing along the south elevation of the Barn. There are three buildings and one structure on the property. *[Photo 8]* The main building is the schoolhouse, located roughly in the center of the property. Approximately 10 feet behind the schoolhouse is the barn, constructed in the 1930s. The barn has two privies attached to it, one for boys and one for girls. These likely replaced earlier privies whose locations are not known, but believed to be along the west property line where two depressions of roughly square and equal size are visible. The third building on the property is a modular unit which was installed in 1996 and will not be

addressed in this assessment as it is not a permanent feature of the property. A small structure was constructed around the pump in 1990. Although non-contributing to the National Register District, this structure is permanent and in keeping with the character and materiality of the other buildings on site and will be discussed further in this assessment.

Between the asphalt paved parking area, which takes up much of the south and east portions of the site, and the schoolhouse is a wood mulch play yard surrounded by fencing. *[Photo 9]* The fencing is chain link and is 3 feet 6 inches high. There are two access points through this fence between the parking areas and the play yard. Wood signs are located on the south and east sides by the play yard, two additional wood slat signs are located out along Barkley Road. On the north end of the play yard, and extending on the east and west sides, is an interlocking masonry retaining wall installed in 2006 to provide a flat area for play equipment within the play yard. *[Photo 10]* The masonry has a split face finish and is reddish brown in color. The wall is 12 inches deep. The wall begins near the modular with a single course and rises as it moves around the north end to seven courses plus a capstone. The wall continues to step back down along the west side, broken only for the entrance to the schoolhouse. The wall is approximately 3 feet 8 inches at the highest point on the north end topped by a post and rail wood fence that adds an additional 2 feet 10 inches to the top of the wall. The wood fence slats are 1 ½ inch square placed at 5 ½ inches on center. The upper and lower rails are 2 x 4 nominal and the posts are 4 x 4 nominal. Beyond this fence, at the property line, is a 3 foot 8 inch chain link fence. Within the play yard all that is left is a rubber perimeter boundary for a sand box and two rubber ramps that led into the play yard before it was over-filled with mulch. *[Photo 11]* A 3 foot 2 inch wide concrete sidewalk wraps around the play yard on the east and south. It narrows towards the south. The sidewalk connects the entrance of the modular to the entrance of the schoolhouse. The remainder of the site is natural vegetation with a 3 foot 8 inch chain link fence on the south end of the west side intersecting the barn. The west and east property lines are defined by a post and woven wire fence that uses both wood and metal posts. A small section of east-west running chain link fencing is located roughly centered at the end of the asphalt drive along the south side of the schoolhouse.

The Barn was constructed c. 1930 to the west of the Schoolhouse. The Barn has a 7 inch wide foundation wall of poured in place concrete. The depth of this foundation is unknown. It is also not known if there are spread footings or if the foundation continues down at a consistent width of 7 inches. The foundation is exposed 9 inches on the interior along the north elevation, but is not visible on the exterior. On the south elevation, the top of the foundation is even with grade. *[Photo 12]* There is a step in the foundation at both the northeast and southwest corners to accommodate the grade. The privies, located along the west end of the Barn, were added later, although the exact date of construction is unknown. *[Photo 13 and Photo 14]* The foundation in this area is discontinuous and the concrete of the privy foundations is not compacted as well as the foundation of the main portion of the Barn.

The exterior walls are constructed of 2 by 4s at 24 inches on center with the siding nailed directly to the exterior face of the framing members. The wall framing spacing becomes

eccentric near the front door. There is a 27 ½ inch spacing east of the front door and a 36 inch spacing around the door. There are three trussed rafters spanning north-south at approximately 4 feet on center. The trussed rafters are constructed of two by four principal rafter and ridge beams with one by four struts and king posts. The struts come in on different sides of the ridge beam, which may contribute to an eccentric loading. The ridge rafter is also a one by four. The hip rafters are two by fours. One of the roof trusses comes in directly over the door opening. There is a single base plate directly in contact with the foundation wall. The wall has a double top plate. The siding and the trim are the same as that found on the schoolhouse, with similar paint preparation issues as further described on page 25 of this assessment. The siding is discontinuous at the privies although the profile is the same. The windows were a later addition based on the cuts in the wood siding done to accommodate their later installation. The windows are 22 inches by 40 inches and are six panes, in a two panel wide by three high configuration. The windows open outward with two surface mounted hinges. The roofing is identical to the schoolhouse but with no gutters or downspouts. There are two ventilators on the roof which were installed when the roof was redone. The barn has exposed eaves and rafter ends similar to the schoolhouse. *[Photo 15]*

The barn has a rough concrete floor. The privies have wood tongue and groove floors. There are no interior finishes. The barn door is 35 ¼ inches wide by 6 foot 6 inches high and is 2 ½ inches thick. The door is unusual and it is not known if it is original or a later addition. The door is a three ply door, the center door consists of siding like the walls of the Barn. Both outer layers look like typical two panel doors. Each ply is ¾ of an inch. The upper panel was glazed and still has glazing stops intact. The lower panel was solid. The door hardware is partially missing, with only a hasp lock to secure the door and a surface mounted latch on the interior. The door is hung on two 4 ½ inch surface mounted ball tipped hinges. The doors to the privies are boarded over and were not observed for this assessment. There are no services into the building.

The pump house was constructed in 1990 to house an existing pump directly north of the schoolhouse. This 12 foot by 12 foot frame building sits on a poured in place concrete foundation. Because the building was constructed on a slope, more of the foundation is exposed on the south and east sides of the building. Metal double doors, measuring 60 inches wide by 84 inches tall, are located on the north side of the building and serve as the entry. A poured concrete pad abuts the foundation outside these doors. *[Photo 16]* The exterior walls are covered with white horizontal siding matching that on the schoolhouse and barn. *[Photo 17]* A small metal entry hatch tops a wood frame “chimney” on the east slope of the low hipped roof. Plastic gutters surround the roof, and one downspout is located on the west side of the building. *[Photo 18]* The interior of the pump house was not inspected.

Condition:

Overall the site is in good condition. The retaining wall is in good condition. The fence on top of the retaining wall is in fair condition and would not be considered to be compliant with today’s building codes. The pickets are spaced too far apart, 4 inches in the maximum allowable, and the fence overall is not tall enough. It should be 3 feet tall

and is only 2 feet 10 inches above the adjacent grade. Approximately 10 percent of the pickets are unsecured and loose. The play yard is in overall good condition, but the build-up of mulch over the years has made it higher than the adjacent grades which could be an issue over time and somewhat detracts from the overall experience of approaching the schoolhouse. The flowerbeds are in good condition. The sidewalks are in good material condition but are too narrow to be a part of an accessible route. See the Accessibility section of this assessment for further information on this condition. The chain link fencing is in good condition. The wood signs are also in good condition. The woven wire and pole fencing is in poor condition along the west elevation where it is partially collapsed and in fair condition elsewhere. However, this fencing is not required or needed for this site so this condition is not of concern.

The Barn foundation is in fair condition with significant efflorescence and water damage along the north elevation where the foundation is exposed on the interior. [Photo 19] This area is completely underground. There is a crack with displacement in the middle of the door foundation. [Photo 20] There are small cracks and missing material in the northwest corner. [Photo 21] A large hole is present in the northeast corner where the foundation steps down. [Photo 22] A large crack is located approximately 3 inches from the southeast corner on the south wall. [Photo 23]

The Barn framing is in fair condition. There is no visible cross bracing or blocking for the framing. The sill plate is in fair condition with significant deterioration visible along the north elevation which is in poor condition. It appears there are some retrofitted repairs along this area including shims and bolts, which may have been installed to shore up the wall. [Photo 24] This area has more exposure to water due to the slope and location of the foundation. The roof framing is also in fair condition. [Photo 25] The trussed rafters should be strengthened at each panel point. The header over the door, where one of the trussed rafters is supported, is in fair condition and that condition may contribute to the damage to the foundation in this area.

The Barn siding and trim are in fair condition. The northeast trim board needs replacement. [Photo 26] The lowest siding board on the north elevation of the privy on the west is damaged due to snow build up and needs to be replaced. Approximately 10 percent of the siding boards have material damage and require replacement. [Photo 27] The siding around the windows has been cut to accommodate the window installation, which were not part of the original construction. [Photo 28] Water staining was apparent in many locations on the interior surface of the siding as well as gaps visible through the siding. The roofing is in good condition. The exposed rafter ends and eaves are in fair condition. Lacking the protection of gutters and downspouts, they have been exposed more to weathering than those at the schoolhouse. The northeast corner in particular is in the worst condition. The windows are in poor condition, but are restorable. The window on the east is in the best condition with extant mullions but no glazing. The door is in fair condition, the construction of it is quite unusual, but the reason for it is not known. The door has exterior finish and paint problems, damage to the panels and missing hardware. Mouse droppings were observed throughout the interior of the barn.

The pump house foundation and roof are in good condition. The siding and trim are in fair condition. The paint is showing general signs of weathering. The upper fascia boards are splitting in places on the west and east elevations. Small chunks of wood are missing from the siding and trim boards on the south elevation. The bottom of the downspout is broken. *[Photo 29]* The gutters are in fair condition. A gutter hanger has broken on the north elevation, and the gutter is sagging badly. The poor spacing of the hangers also contributes to the condition of the gutters. *[Photo 30]*

Recommendations:

- Monitor cracks in the barn foundation to ensure they are not increasing in size. (Barn)
- Replace the fence to meet current code requirements in terms of height and spacing of pickets. (All buildings)
- Infill repairs of missing concrete on the northeast and northwest corners should be completed using a mixture of new concrete compatible with the existing material. (Barn)
- Remove excess mulch and re-grade play area to allow for a lower play yard that doesn't get in the way of the view on approach. (All buildings)
- Waterproofing should be considered for the exterior of the north foundation wall of the barn. Full waterproofing may be cost prohibitive, but at a minimum a swale should be created several feet from the foundation to promote drainage away from the foundation. (Barn)
- Sister the header over the door to provide further support for the trussed rafter. (Barn)
- Damaged trim boards and siding on the barn should be replaced with like material. (Barn)
- Repair exposed rafter ends and eaves. (Barn)
- Trussed rafters should be strengthened at each panel point. (Barn)
- Fill gaps around the windows on the barn where the siding has been cut to accommodate window installation. (Barn)
- Caulk gaps in siding where water is currently allowed to penetrate. (Barn)
- Restore windows to their historic condition. (Barn)
- Restore barn door with glazed safety glass and hardware that makes sense to the usage of the building. (Barn)
- After all repairs have been completed, all loose existing paint should be removed, the substrates scraped to a smooth surface, repaired with epoxy consolidant where necessary, primed and repainted. All wood surfaces should be primed with a high quality oil-based wood primer and then top coated with two coats of acrylic latex or oil-alkyd paint. (Barn and Pump House)
- Repair gutters on the pump house, or replace them with metal gutters and downspouts that are able to withstand heavy snow. (Pump House)
- Replace the sill plate if further investigation indicates water damage. Repair any framing which is also shown to have damage. (Barn)
- Consult a structural engineer if the building's usage is changed. (Barn)

- See Hazardous Materials portion of this assessment for proper handling of mouse droppings found in the Barn. (Barn)

3.1.2. Parking

There is an asphalt-paved parking lot located east and south of the building. An asphalt driveway leads from Barkley road into the parking area in the southeast corner of the site. A modular building is located at the north end of the parking area. There are four designated parking spaces near the modular building. There are seven spots paralleling the road south of the school. *[Photo 31]* There are five more east of the modular along the east property line. There is one designated van accessible site at the east end of the modular building. *[Photo 32]* There is ample room for 10 or more cars to park along the drive, although these spots do not have stripes to delineate them. The asphalt drive continues down along the south side of the building providing fire and service access to the basement of the building. *[Photo 33]*

Condition:

The parking lot is in good to fair condition with minor cracks and some areas that have previously been patched. Overall it has been well maintained. One area of fair condition was observed at the far west end of the access drive to the basement where flowing water has eroded the side of the drive, taking asphalt down the slope. There appears to be room for sufficient parking on site, but there is no room for overflow parking. If needed, restriping the lot could provide for a more organized usage of the existing space.

Recommendations:

- Provide a culvert or surface linear drain to prevent erosion of the asphalt along the southwest section of the lot.
- Consider restriping the parking lot to provide for a more organized usage of the space.

3.1.3. Archaeology

No known archeological surveys have been done on the site. This is the first known building constructed on the site. The area surrounding it has been impacted both when the building was originally constructed and during subsequent construction of the associated buildings and parking areas. The existing site has undergone significant change and development from its native state. Those changes make it somewhat improbable that significant archaeological evidence is present in an undisturbed condition in the upper strata of the existing grades, 12 to 24 inches or more. However, it is known that the original privies were not located where the current privies are, although their location may be underneath the current footprint of the barn. Two roughly square shaped depressions were observed at the far west end of the site, one north and one south of the current barn location. This could also be the location of the original privies. Therefore, potential archaeological information could be gleaned from the discovery and excavation of both the original and the newer privy pits. School yards are also known to hold many

everyday items including broken toys, coins, food remains and buttons to name a few commonly found items. The original schoolyard is known to have consisted of several pieces of playground equipment such as swings, monkey bars, hanging bars and teeter-totters which were located at the level of the basement on the south side of the building. As such, many potential items may have been significantly disturbed and covered when the asphalt drive was established. A merry-go-round was installed sometime in the 1950s on higher ground on the right side of the school.

Recommendations:

- Follow the archeological guidelines required by the State Historical Fund for all construction activities that disturb the ground on the site. Archaeological monitoring for ground disturbance should be included in each phase of the project that might require excavation or other disturbance on the site.

3.2. FOUNDATION

3.2.1. Foundation Systems

The building was originally constructed with a concrete foundation. The extent and configuration of the footings is not known, although it is assumed they are also of concrete construction. It is unknown if steel reinforcing was used for any portion of the foundation, but none was observed. The foundation was poured in place with board forms. The boards used for the formwork averaged 6 inches in width. The foundation wall has an exposure of 6 feet 2 inches in the southwest corner and is reduced to 9 inch exposure at the northwest corner as the site slopes upward. The concrete is painted on the exterior where exposed. The first 2 feet right of the basement door is a rougher mixture, the concrete elsewhere is smooth finished but this concrete has exposed large aggregate. The tops of the basement window openings are consistent with the top of the concrete foundation. The interior of the foundation walls are painted where visible in finished space and raw concrete in spaces such as the crawl space. The foundation is not visible on the north or east side from the exterior. It is unlikely the concrete would have any reinforcement given the date of construction.

Condition:

The foundation is in fair condition. There is spalling of the material and loss of paint along the west wall due to scouring of water flowing along the adjacent slope. *[Photo 34]* This deterioration extends approximately 8 inches up the wall from the adjacent grade. It is in the worst condition where the chimney blocks the flow of water. A minor crack was observed on the west wall beneath the north window and another small crack where a 6 inch diameter vent penetrates the wall. A slightly larger crack was observed extending from the corner of the boarded up window on the south end of the west elevation. *[Photo 35]* A rough area is located near the door, this appears to be from poor installation in this area rather than weathering or any subsequent deterioration mechanism. It appears that pour wasn't compacted well and as this condition is not observed elsewhere around the building, it also appears to be an isolated occurrence.

Placing too much concrete at any one area at a time, or failing to compact concrete adequately can result in incomplete consolidation, causing a honeycomb pattern. This is a workmanship issue and does not result in lessening of the structural integrity of the concrete. Minor cracking was also observed behind the electrical panels, most likely due to the installation, moving and removal of the utilities in this area. Very small diagonal cracks were observed from each corner of the basement door. Cracks that occur from corners of openings are not uncommon and generally result from a concentration of loads in the corner. Settlement can cause the vertical cracks seen in several locations throughout the foundation.

Several more cracks are visible from the interior, from the corners of the chimney opening and on the north wall of the furnace room. The largest cracks are roughly vertical midway along the east wall of the basement and down from the corner of the boarded up window between the bathrooms. *[Photo 36]* Minor spalling was observed near the toilet in the girls' bathroom.

Recommendations:

- Monitor existing foundation cracks to ensure they are not increasing in size.
- Consult with engineer if cracks are found to be growing.
- Patch exterior and interior surfaces of the eroded concrete and paint.
- Annual inspections of the existing foundation walls of the structure are recommended. Inspections should look for signs of cracking, differential movement and water intrusion.

3.2.2. Perimeter Foundation Drainage

The existing grades around the building were visually studied for signs of settlement and other movement. A minimum of 6 inches of slope of the adjacent grade away from the foundation in the first 10 feet is recommended. This is achieved along the east, west and south sides of the building, but due to the overall slope of the site, the north side grade slopes directly into the foundation area. This condition can contribute to foundation water infiltration and other deterioration of the materials on both the interior and the exterior along this elevation. The building has asphalt paving up to the foundation wall along the south side only, the remainder is soil at grade. The composition of the backfill and compaction level is unknown. There is no perimeter drainage system. It is unlikely there is any positive side waterproofing on the foundation wall due to the age of the construction.

Condition:

The backfill is overall in good condition, with only the north side considered to be in fair condition. The primary deficiency on the north side is the natural slope of the site. This has led to build up of soil against the wood water table board as well as allowing water to flow directly towards the foundation. There is also a need for greater slope along the west elevation of the building and the north side of the projecting chimney. This area is in fair condition.

Recommendations:

- Provide a swale along the north elevation of the building to promote drainage away from the foundation.
- Remove soil from directly touching the water table board and repair water table board as recommended in the exterior materials section.
- Provide sufficient slope away from all sides of the building foundation and the north side of the chimney. The grade should slope positively 6 inches in the first 10 feet.

3.3. BUILDING STRUCTURAL SYSTEM

3.3.1. General Structural System Description

The general structural system consists of a wood framed structure with concrete foundation walls. The walls, floors and roof are all wood framed and it appears the building was platform framed. The foundation and basement walls are cast in place concrete. There has been speculation that this building may have been a “kit,” a complete structure ordered through a catalog and delivered on site for erection, due to the fact that there is a complex of three building down the hill in Conifer Junction which are confirmed as kit buildings. One of the main identifiers for a kit building is the plan number which is incised on each framing member. The framing boards of a precut kit building were numbered in order to facilitate construction. After the building is built, it is usually possible to see some of these numbers. Presence of part numbers constitutes proof that the house is in fact a mail order kit. No such marks were found on any of the framing members of the schoolhouse making it unlikely that this building was constructed from a catalog. The 1908 Sears “Modern Homes” catalog featured a kit schoolhouse, but it was a large, two story masonry structure. It was not offered in future editions and it is unknown if one was ever built. There are several other examples of kit schoolhouses, but none were found that look like the Little White Schoolhouse. There is no record of the Gordon-Van Tine Company, from whose catalog the Conifer Junction buildings were ordered, ever offering a schoolhouse kit. The newspaper articles of the construction of the schoolhouse do not mention that it was from a kit.

3.3.2. First Floor Framing

The first floor framing consists of 2 inch by 12 inch members at 16 inches on center. There is a diagonal subfloor beneath the finished wood floor. There was no blocking observed. The joists are supported by the foundation walls on the north and south and by a wood beam consisting of four 2 inch by 10 inch members that runs north south and is visible in the basement. *[Photo 37]* The beam bears on the foundation wall just east of the basement door and not visibly in the crawl space. This beam is supported by a wood column consisting of four 2 inch by 10 inch members in the basement. *[Photo 38]* This beam is furred out where visible, another is located in the crawl space and the members can be clearly seen. The joists run east west and span 9 feet 3 inches from east foundation to the beam and 15 feet from the beam to the west foundation wall. The joists

are supported on a wood top plate at the top of the concrete foundation wall and overlap at the beams.

The first floor framing was given a preliminary structural analysis using Kidder-Parker's 1931 version of the Architects' and Builders' Handbook. The framing members were assumed to be Inland Empire Douglas Fir No. 1 common dimension which have the following properties according to the Manufacturers' Association Standard commercial grades table: allowable stress in bending of 1,135 pounds per square inch; maximum horizontal shear of 70 pounds per square inch; and modulus of elasticity of 1,500,000 pounds per square inch. The New York Building code of 1931 required classrooms to have a live load capacity of 75 pounds per square foot. Current code requires 40 pounds per square foot for classroom space. The building was analyzed using 70 pounds per square foot with a plaster ceiling. This was chosen because it is close to the code requirements in place at the time of construction. 2 by 12 inch members, spaced at 16 inches apart, have a maximum span of 15 feet 8 inches when limited by deflection and a maximum span of 15 feet 3 inches when limited by bending. Shear was not analyzed as there is no table for limiting due to shear for 70 pounds per square foot loading. Therefore, we see that the maximum measured span in the building, 15 feet, is within allowable maximums given at the time of construction, using the set of assumptions described above.

Condition:

The first floor framing is in good condition.

Recommendations:

- There are no recommendations for first floor framing at this time.

3.3.3. Roof Framing System

The roof framing is visible through two openings, one in each cloakroom. This exposes the hips over the cloakrooms. In order to view the main portion of the roof, there are two openings between the cloakroom roof framing and the main roofing. The ceiling framing is 2 inch by 6 inch members. The roof framing in the hipped cloakroom roofs consists of 2 inch by 6 inch members approximately 20 inches on center. *[Photo 39]* The remainder of the roof is framed with similar members at approximately 24 inches on center. The roof is framed with trussed rafters, the exact spacing could not be determined. There is original solid sheathing on the roof. It is not known if they re-sheathed the roof when they re-roofed the building. The roof framing does not line up directly with the wall framing, but this is acceptable given the double top plate wall construction.

Condition:

The roof framing system is in good condition. No damage to framing members or significant water staining was observed.

Recommendations:

- There are no recommendations for the roof framing system at this time.

3.4. BUILDING ENVELOPE – EXTERIOR WALLS

3.4.1. Exterior Wall Construction

The exterior wall construction consists of wood framed walls with horizontal wood siding on the exterior and drywall finish on the interior. There is no insulation within the wall assembly. The wall depth at the openings was measured at 7 ¼ inches exclusive of trim. The walls are framed with 2 inch by 4 inch members at 16 inches on center. This allows for 5/8 inch dry wall and an inch of exterior siding within the measured assembly. 7/8" diagonal sheathing was observed beneath the siding and the 5/8" sheetrock is nailed directly to the interior of the studs. The presence of bracing for lateral stability was not observed. The walls have a double top plate.

Condition:

The exterior wall construction is in good condition.

Recommendations:

- There are no recommendations for exterior wall construction at this time.

3.4.2. Exterior Finishes

The schoolhouse is covered in horizontal wood drop channel or Dutch lap siding. The siding and trim are painted white. There is no indication of earlier color schemes. There are 5 inch flat plain boards at the corners, 4 ½ inch flat plain window and door casing trim and 6 inch architraves over the doors and windows consisting of two members. The 2 by 6 exposed rafter ends have angled ends. A wood base shoe is located where the walls meet the porch floor. Wood window boxes are located beneath the two east facing windows. It is not believed that these are original features. The water table trim board is 12 inches wide and there is a projecting trim piece between this trim board and the siding.

Condition:

The siding is overall in good condition. The preparation prior to the previous paint job has left it somewhat more vulnerable to weathering than if the wood had been scraped and sanded to a smooth surface. Minor paint failure is able to be observed on all of the elevations. *[Photo 40]* The only damage to the wood material itself is along the south elevation where utilities have been connected, moved and removed. *[Photo 41]* Damage includes cracked and broken siding, cut outs in trim details, and patched penetrations. This area is considered to be in fair condition. The corner trim boards are in good condition. Due to some paint failure the rafter ends are in fair condition. At the north elevation, paint failure is significant near the gutter attachment at the underside of the eaves. *[Photo 42]* Ends of two of the rafter tails are beginning to show signs of deterioration. Ice and snow may be piling up along the gutter, since this exposure does not get sun during the winter, it could build up significantly. The most significant damage

occurs on the west elevation north of the chimney. In this location, the gutter has been cut back to allow for the 6 inch diameter vent to extend up along the chimney through the eaves. *[Photo 43]* As this is on the north side of the chimney, it is in shadow for a significant portion of the year and snow builds up against the chimney. Water drains through this gap in the gutter, along the chimney, deteriorating the vent, the stone and mortar and the wood of the eaves and adjacent rafter tail. Rust stains on the vent pipe indicate where the water runs and the direction it continues to the ground. *[Photo 44]* This area is in poor condition.

The base shoe on the porch is in good condition. The window boxes are in poor condition; the bottoms are damaged and can no longer serve the intended purpose. The south window box is also missing corner trim. The water table trim board is in fair condition. The boards are separating at the corners. *[Photo 45]* The water table trim board is in direct contact with the adjacent grade along the north side which has hastened the deterioration on this elevation. The trim piece between the water table trim board and the siding is generally in fair condition. Projecting courses often take the brunt of weathering and are therefore in worse overall condition than the adjacent trim boards and siding, as has been the case with this building. There is minor splitting and material damage along the north elevation and further material damage along the west. Portions of this trim piece will need to be replaced along this elevation. It has been further cut away in multiple locations where electrical and other services have been installed, moved and removed along the south elevation. This trim piece also needs replacement along the east elevation north of the main entrance.

Recommendations:

- Damaged rafter tails should be repaired with epoxy consolidant where necessary.
- Repair or replace deteriorated or missing trim boards, corner trim and window boxes.
- After all repairs have been completed, all loose existing paint should be removed, the substrates scraped to a smooth surface, repaired with epoxy consolidant where necessary, primed and repainted. All wood surfaces should be primed with a high quality oil-based wood primer and then top coated with two coats of acrylic latex or oil-alkyd paint.
- See also recommendations for “Drainage Systems, Gutters, Downspouts and Sheet Metal Flashing” in section 3.5.2

3.4.3. Exterior Appendages – Porches, Chimneys and Signs

Roughly centered on the west elevation, the chimney consists of random rubble coursed brown and red native granite stones. The stones are rough cut and vary in size. The stones are mortared with buff colored mortar with large aggregate. The chimney projects 2 feet from the west wall of the schoolhouse and is 4 feet wide. It tapers to the top and at the top are vertically mortared stones creating a cap. A 6 inch diameter metal vent runs alongside the chimney. Originally, the chimney was most likely used to vent a potbellied stove in the basement. *[Photo 46]*

There is a small concrete stoop located outside the north door. *[Photo 47]* This stoop is 2 feet by 4 feet and is 10 inches at the greatest exposure. This stoop most likely dates to the installation of this door which is not original. The date of install is not known.

There is a wide porch on the east elevation of the building, centered between the two cloakrooms. The porch is 21 feet wide by 5 feet deep, and the east slope of the hipped roof extends to cover it. The porch roof is supported by two wooden posts, one on either side of the steps leading to the porch. One inch by six inch wood boards face each of the posts. It is unknown if they cover an internal structure or post. Photographs of the schoolhouse from the mid-1950s show a square post similar to what now supports the porch roof. The deck of the porch is covered with 3 ¼ inch tongue and groove flooring that has been painted a dark green. *[Photo 48]* A wood base shoe trims the porch deck where it meets the exterior walls of the school. Wooden railings line the front edge of the porch between each post and the nearest cloakroom. The railings are made of nominal 2 inch by 2 inch balusters between a nominal 2 inch by 6 inch top rail and a nominal 2 inch by 4 inch bottom rail. The railings are painted white.

Steps leading to the porch are centered on the building and are 7 feet wide. Each step consists of two nominal 2 inch by 6 inch wood boards, painted dark green. The rise of each step is 5 ¼ inches, and the run is 11 inches. Wooden railings on either side of the steps are similar in construction to those on the porch. *[Photo 49]*

Condition:

The chimney is in good condition, with one area of fair condition. On the north, water is able to run down the roof, through the gap in the eaves and directly along the surface of the chimney. This has caused a vertical crack to occur roughly centered along the projecting north face of the chimney. Cracking and mortar deterioration will continue to occur in this location until the water issue is resolved. The base of the chimney has minimal deterioration to the mortar due to erosion from water flowing down the adjacent slope.

The decking is heaving and uneven in areas where it is exposed to weather.

The concrete stoop is in fair condition. As this is currently an identified part of the egress path, it does not meet current code requirements for exiting. See the Building Code Analysis portion of this assessment for further information and recommendations relating to the code-related aspects of this element.

Recommendations:

- See sheet metal section of this assessment for recommendations relating to the water from the roof.
- Perform mortar analysis prior to repointing areas of deterioration on the chimney.
- Repoint crack and replace minor areas of lost mortar in the chimney. After repointing monitor the crack along the north side of the chimney for signs of movement and to ensure the repointing takes place.

- Repair or replace porch deck boards that are damaged. Prepare and repaint the porch following instructions outlined under Associated Landscape Features section. The entire porch does not need to be replaced, just damaged deck boards.

3.5. BUILDING ENVELOPE – ROOFING AND WATERPROOFING

3.5.1. Roofing Systems – General

The building was originally roofed with wood shingles, but these were replaced with asphalt composite shingles in 2007. These shingles are grey-green dimensional shingles with matching ridge shingles. All of the buildings and structures on site, with the exception of the modular, have the same roofing material.

Condition:

The roofing is in good condition.

Recommendations:

- There are no recommendations for roofing at this time.

3.5.2. Drainage Systems, Gutters, Downspouts and Sheet Metal Flashing

All four sides have 5 inch ogee profiled gutters, installed when the roof was replaced in 2007. The gutters are all white prefinished metal. The gutters are drained by four 3 inch by 2 inch rectangular corrugated downspouts around the building. Each of the downspouts has an extension appropriate for the drainage location, for instance the downspout nearest the chimney has an extension at the ground longer than the chimney footprint which allows water to drain downhill. The porch has a separate gutter and downspout system of the same profile, dimension and appearance. Heat tape was observed in the porch gutter. The gutter on the west elevation is cut back from the chimney in order to allow a 6 inch vent to extend upward along the chimney. This has caused major water issues in this area.

Overlapping sheet metal is installed where the porch roof meets the wall siding. It is unpainted galvanized and was installed when the roofing was done in 2007. There is also sheet metal flashing at the junction of the chimney to the roof.

Condition:

In general, the drainage systems, gutters, downspouts and sheet metal flashings are all in good condition. The cut-back gutter on the west elevation north of the chimney is in poor condition and is causing deterioration to all adjacent materials.

Recommendations:

- Remove the unused vent which extends up the north side of the chimney. Close and seal the opening.

- Replace the gutter to extend all the way to the chimney.
- Provide a sheet metal saddle that will encourage drainage off the north side of the chimney where it intersects the roof.

3.6. DOORS AND WINDOWS

3.6.1. Exterior Windows and Hardware – General

All windows appear to be original to the building and are of wood construction. All windows have an exterior that is painted white, matching the rest of the building. There are no screens on any of the windows.

3.6.2. First Floor Windows and Hardware

All 16 first floor windows are constructed of wood and of a 6/6 double hung configuration, measuring 34 ½ inches wide by 54 ½ inches tall. 10 inch wide by 12 inch tall true divided lights are found on both the upper and lower sashes of each window. The windows are found throughout the building alone or in groupings of two or three. The interior of each first floor window has a sash lock. There are no sash pulls.

In the main classroom area, a pair of windows is located on each side of the main entry door, facing east. Facing north are three windows located in a group. Two pairs of windows face west. One pair is just to the right of the basement door, and the other pair is just to the left of the north door. Two windows face south from the main classroom. One window is located in each of the cloakrooms, facing east. One window is located in the stairwell leading to the basement, presumably separated from the other south facing windows when the stairwell was enclosed.

The interior of the north cloakroom window has been varnished, while the interior of all other first floor windows have been painted.

Condition:

The first floor windows are in fair condition. The upper sashes on all 16 windows have been painted shut, and roughly half of the windows have operable lower sashes. Putty is cracked or missing on the exterior of many windows, and the paint is weathered. *[Photo 50]* The sash cords on the majority of the windows have been painted, inhibiting smooth operation.

The four east facing first floor windows are in condition typical of others in the building. The lower sashes are painted shut on three of the east facing windows, leaving only one operable. The window directly to the north of the main entry has a nonworking sash lock. The window directly to the south of the main entrance has several damaged panes of glass; one pane has a divot in the glazing, and another pane is heavily scratched. *[Photo 51]* The southernmost window on the east elevation also has one heavily scratched pane.

The three north facing windows are in condition similar to those on the east elevation. Only the middle window has an operable lower sash. The easternmost window has one broken pane. *[Photo 52]*

Two of the first floor south facing windows are accessible from the main classroom. The easternmost of these windows has a lower sash that has been painted shut. The window to its right has an operable lower sash which contains one heavily scratched pane. The third south facing window has been enclosed in the stairwell leading to the basement. *[Photo 53]* Because of the location of this window, it is not used. All panes on this window appear to be in good shape, and the sash cords appear to be intact.

The west facing first floor windows are in worse conditions than most of the others. The second window to the right of the basement door has a cracked stop on its left edge, but is in operable condition. The window to its right has a broken right sash cord, but has an operable lower sash. A sizable piece of wood is missing from its right stop. *[Photo 54]* The window just to the left of the north door has rough spots where paint has been chipped and wood splintered.

The cloakroom windows appear to be in fair condition. Both cloakroom windows are operable.

Recommendations:

- Repair inoperable windows by replacing broken and painted sash cords and replacing or consolidating broken stops and stiles. Returning the upper sashes to operable condition is not necessary.
- Replace broken or heavily damaged panes.
- Consolidate or replace broken window parts.
- Replace cracked and missing putty on windows. Match existing composition and color as closely as possible. Replace broken panes to match existing.
- The joints around each window should be sealed with a high quality elastomeric sealant on the exterior.
- After all repairs have been completed, all loose existing paint should be removed, the substrates scraped to a smooth surface and repaired with epoxy consolidant where necessary, primed and repainted. All wood surfaces should be primed with a high-quality oil-based wood primer and then top coated with two coats of acrylic latex or oil-alkyd paint. Investigation into the original paint scheme of the building should be conducted prior to selecting a new paint scheme. It is desirable to reproduce the original paint scheme if it can be determined.

3.6.3. Basement Windows and Hardware

Basement windows are found on the south and west elevations of the school. On the south elevation, one fixed 4 pane wood window measuring 25 ½ inches wide by 30 ½ inches tall is found to the west of the basement door. Fasteners found on three of the four interior edges of the window appear to have previously held a screen window. Two wood 4 pane casement windows measuring 25 ½ inches wide by 30 ½ inches tall abut

each other to the east of the basement door. Two hinges are located on the outside edge of each casement window. A single ring handle casement latch on the interior of the window secures the casement windows to each other. 10 inch wide by 12 inch tall true divided lights are found on each of these windows. In the foundation on the west elevation, a 29 $\frac{3}{4}$ inch wide by 48 $\frac{3}{4}$ inch high piece of plywood covers an old window. *[Photo 55]* From the interior of the basement, only part of this window is visible. The visible portion is of wood construction and has 4 true divided lights. No hinges are visible on this window. *[Photo 56]*

Condition:

The basement windows are in fair condition. The exterior of these windows have cracked putty and peeling paint. The casement windows appear to be painted shut. The interior of the easternmost casement window has a missing piece of wood on its upper rail. A piece of wood is missing from an interior stile on this same window. The interior of the westernmost casement window has a crack in its upper stile. *[Photo 57]*

Recommendations:

- Consolidate or replace broken window parts.
- Replace cracked and missing putty on windows. Match existing composition and color as closely as possible. Replace broken panes to match existing.
- Repair the existing original windows and put in operating condition. The joints around each window should be sealed with a high quality elastomeric sealant on the exterior.
- After all repairs have been completed, all loose existing paint should be removed, the substrates scraped to a smooth surface and repaired with epoxy consolidant where necessary, primed and repainted. All wood surfaces should be primed with a high-quality oil-based wood primer and then top coated with two coats of acrylic latex or oil-alkyd paint. Investigation into the original paint scheme of the building should be conducted prior to selecting a new paint scheme. It is desirable to reproduce the original paint scheme if it can be determined.

3.6.4. Exterior Doors and Hardware

The building has five exterior doors. The main entry door is centered on the east elevation inside the main porch. The side entrance is located on the north elevation. The basement door is located on the south elevation, and leads into the building from an asphalt area connected to the parking lot. Doors lead from the porch to the boys and girls cloakrooms. The basement door and the north door appear to be newer than the others, but, a date is unknown. The main entry and cloakroom doors are all of a similar configuration and appear to be original.

The main entry door measures 6 feet 8 inches tall by 3 feet wide by 1 $\frac{3}{4}$ inches thick. It appears to have originally contained a window at the top of the door, but the opening has now been filled with plywood. *[Photo 58]* Three raised panels are found below this window opening. The door is hung on two round tipped fully mortised pin hinges. Other

hardware includes a large full plate handle and lockset, a closer and an exit device. It appears that the lockset has been moved from the left to the right side of the door. The exterior of the door has been painted dark green, while the interior of the door has been painted yellow.

The side entrance is located at the west edge of the north elevation. The wood door is 36 inches wide by 80 ½ inches tall by 1 ¾ inches thick. A 4 pane window is found above three raised wood panels. The door is hung by three flat tipped fully mortised pin hinges. Other hardware includes a large full plate handle and lockset, a closer and an exit device. The exterior of the door has been painted white, and the interior is painted green. *[Photo 59]*

The doors leading from each of the cloakrooms to the porch are slightly smaller than the main entry door, and measure 32 ¼ inches wide by 79 ¼ inches tall by 1 5/8 inches. *[Photo 60]* The door to the south cloakroom appears to originally have been configured with five raised panels. Currently, the top three panels are raised and the bottom two panels have been filled with plywood attached to the door with strip lumber. The exterior of the door has been painted, while the interior of the door is unpainted and varnished. The door is hung on two round tipped fully mortised pin hinges. Other hardware includes a skeleton key lockset with metal doorknobs and rectangular escutcheons, and two slide bolts which secure the door from the inside. The exterior doorknob and escutcheon have been painted, while the interior hardware is unpainted.

The door to the north cloakroom appears to have originally been configured with five raised panels. Currently, the bottom panel and top three panels are raised. The other panel has been filled with plywood which covers a hinged wooden book drop. The door is hung with two round tipped fully mortised pin hinges. Other hardware includes a skeleton key lockset with metal doorknobs and rectangular escutcheons, and a slide bolt which secures the door from the inside. The outer doorknob remains unpainted metal, while the escutcheon has been painted. The interior doorknob and escutcheon are unpainted. The exterior of the door has been painted, but the interior of the door is unpainted. A slide bolt secures the door from the inside.

The basement door measures 37 ¾ inches side by 77 ¾ inches tall by 1 11/16 inches thick. The wood door contains one 1/1 sliding aluminum window that is covered with a screen. The door is hung by two heavy pin hinges. Other hardware includes a large brass door handle and a separate deadbolt lock. An exit device is mounted on the interior of the door. *[Photo 61]*

Condition:

The main entry door is in fair condition. Metal and wood patches are evidence of hardware being replaced and the door being reversed. The top two raised panels in the door are cracked. The paint is weathered and chipped in places. Numerous nail holes are found on the exterior of the door.

The side entrance door is in fair condition. There is a crack in the hinge stile near the upper hinge on the door. *[Photo 62]* A missing piece of a muntin has exposed the lower edge of one of the panes of glass in the door. The interior of the door is in good condition.

The south cloakroom door leading to the porch is in fair condition. A small section of wood along the lock stile is missing, exposing the lock mechanism. *[Photo 63]* The exterior of the door contains numerous dings and nail holes, and the paint is weathered. The second panel from the top contains a crack. A piece of the bottom rail on the exterior of the door is missing. The threshold of the door is missing.

The north cloakroom door leading to the porch is in fair condition. Paint on the exterior of the door is weathered, and numerous dings and nail holes are present. The raised panels are cracked.

The basement door is in good condition.

Recommendations:

- Damaged or missing door parts should be replaced or repaired using consolidant.
- Doors should be stripped and repainted or refinished.
- Cracked or missing raised panels should be replaced with new milled panels.
- The missing window in the main entry door should be replaced.
- Cracked and missing putty should be replaced on the north door.
- The threshold for the south cloakroom door should be replaced.

3.7. INTERIOR FINISHES

3.7.1. Wall Finish and Interior Trim Materials

The walls are painted sheetrock from 3 feet 1 inch above the floor to the ceiling. Sheetrock is used to build walls in homes, business and other settings. This product was first developed by the United States Gypsum Company in 1916. It is made primarily out of plaster, but for years it also contained asbestos, which helped to strengthen the boards. USGC did very well with this product, and it was used in structures all over the nation. The very name Sheetrock became synonymous with drywall. This is a very early example of the use of Sheetrock, although developed in 1916 it did not become commonplace in construction until World War II. There is a label on the backside of the Sheetrock which is visible from the attic space. The copyright on the label is 1921 and there is a Denver distribution office listed, so it appears this is indeed an early original example. *[Figure 1]*

Below this is a vertically oriented 5/8 inch thick beadboard wainscoting which is now painted throughout the classroom and in the south cloakroom. *[Photo 64]* The time in which the wainscoting was painted is unknown. The original stained and varnished finish can be observed in the north cloakroom and in locations along the east wall where it was protected from painting. *[Photo 65]* A wood chair rail separates the wainscot from the

sheetrock above. There is a base shoe where the wainscot meets the flooring. In the south cloakroom, hardboard paneling with vertical grooves has been installed on the interior walls at the northwest corner up to 5 feet 9 inches above the floor. This paneling is painted.

The basement has sheetrock as well as scored hardboard which looks like 4 inch by 4 inch tile. [Photo 66] The hardboard dates to the installation of the toilets and is located on the toilet room partitions and the main room side of the office.

A modern drywall partition was installed in the center of the main room on the first floor, and the majority of this wall has been removed. A stub of this wall still exists on the east wall.

Condition:

The sheetrock in the main space has been recently skim coated and is in good condition. Refer to the Hazardous Materials section of this assessment for more information on the treatment of this material. The wood chair rail in the main room is in poor condition, with approximately 50 percent of the original material missing in the main room. [Photo 67] The wainscot in the main room is in fair condition with approximately 25 percent of the material damaged. This damage is a combination of missing chair rail, minor impact damage and miss-matched paint. The walls and wainscoting in the south cloakroom are in fair condition with some minor damage to paint and some missing chair rail. The wainscot has damage below the south window. The walls and wainscot in the north cloakroom are in good condition.

Recommendations:

- Strip wainscot, chair rail and trim upstairs based on the finish of trim in the north cloakroom for final aesthetic.
- Replace missing sections of chair rail in the main classroom, and finish to match trim in the cloakrooms.
- Replace or repair damaged wainscot on the main level and finish to match trim in the cloakrooms.
- Remove the stub of the partition wall on the east wall. Repair the ceiling, wall and floor in area after the stub wall is removed.

3.7.2. Ceiling Finish and Trim Materials

The original ceiling finish is described as having "...broader milled strips on the ceiling, which gives a fine beam effect, and better support to the ceiling board."⁹ It appears that the ceiling was most likely originally the same sheetrock material as the walls, but perhaps had a harder time holding up with the horizontal installation. The original broader milled strips were finished with oil and varnish just as the flooring, trim and wainscot were. The current finished ceilings throughout the building are painted drywall.

⁹ March 8, 1923 issue of the *Colorado Transcript*

There is no visible label on the drywall to identify the date of installation. There is a four inch wide crown molding trim piece with a slight profile between the ceiling and the walls in the main room. *[Photo 68]* The cloakroom has a molded crown molding that was originally stained and varnished. *[Photo 69]* It is now painted in the south cloakroom. The crown mold has been pieced together, which either means it was not original or they used left over pieces since these were secondary rooms. It is unusual that the main room would have such as simplified crown mold with a fancier one in the secondary rooms. The main room's ceiling has been replaced, along with the crown molding. Due to the profile of the trim, it may have been done at the same time as the stair enclosure and north door were installed.

Condition:

The ceiling in the main room is in good condition with one area of minor water staining. There is also some mismatched paint which may be hiding other areas of prior staining. There are no ghosts of light fixture locations visible on the ceiling. There is a ghost of the removed partition which should be patched. The ceiling in the south cloakroom is in good condition. The crown molding is also in good condition with only minor areas of missing material where the removed partition wall had been installed.

Recommendations:

- Patch the location of the removed partition wall and paint to match adjacent.
- Replace missing crown molding and paint to match adjacent.
- Paint ceiling at area of minor water staining and where paint mismatches.

3.7.3. Floor Finish and Trim Materials

The classroom has original pine tongue and groove wood floors throughout, although the northern half of the room is covered in a carpet installed in 1984. The pine floors are 2 ¼ inch boards and are stained and varnished, although it is believed the current color is not original. The finish is heavy duty, very thick finish similar to what one would use on a wood gymnasium floor and is not appropriate to the type of flooring or use of the building. There are two patches of oak planks which have been integrated into the flooring near the middle of the room. These patches represent the original locations of the heating grilles for the potbellied stove. It is unknown if there are similar patches underneath the direct glue down carpeting covering the north side of the room. The registers have since been moved to exterior wall locations. According to the National Register registration form, the pine for the floors was from nearby Black Mountain where it was cut and milled before being installed in the schoolhouse. The stairs are also pine tongue and groove. The basement floor is primarily painted Masonite in the main space with carpeting covering about a third of the eastern portion of the room. The mechanical room, bathrooms and office have 12 inch by 12 inch vinyl composition tile with rubber base.

Condition:

The wood floor is in fair condition, wear is evident in the heavily traveled areas and the existing finish and color is not historically accurate. The carpet is also inappropriate and should be removed. There is less than ¼ of an inch left in the upper wall of the groove of the flooring measured where it is visible at the floor grilles. This floor has been refinished at least once, and most floors of this thickness begin to compromise the tongues after two to three refinishing, so the least destructive, longest lasting refinishing option should be selected.

The carpet in the basement is in good condition. The vinyl tile is in good condition. The Masonite is in good condition, but is an unusual finish for a floor.

Recommendations:

- Remove the carpet from the north half of the main classroom.
- Sand and refinish the main classroom floor. Use of a random orbital sander may be the best choice due to the thinness of the existing flooring. Match the finish to the cloakroom materials.

3.7.4. Interior Doors, Trim and Hardware

The cloakroom doors are both original. They measure 6 feet 8 inches by 2 feet 6 inches wide and are 1 3/8 inches thick. *[Photo 70]* They have 5 laying raised panels. The south cloakroom door is painted on both sides, the north retains the original stained and varnished finish on the cloakroom side only. The doors are hung on two 5 inch round tipped fully mortised pin hinges which have been painted on the south door. The locksets are standard oil rubbed bronze door knobs and rectangular escutcheons, again painted on the south door. The south door has additional hardware consisting of two sliding bolts.

The door to the basement is not original. It measures 6 feet 8 inches by 2 feet 6 inches by 1 ¾ inches thick. This door is a flat slab door which has been painted and is hung on three 4 inch flat tipped fully mortised pin hinges. This door has a brass Wesloon door knob.

The bathroom doors each measure 6 feet 5 inches by 2 feet 6 inches and are 1 3/8 inch thick. They have a single full panel and are hung on two round tipped 5 inch Griffin brand pin hinges which are half surface mounted. The doorknob and rectangular escutcheon have a brass finish. *[Photo 71]*

The mechanical room door is a labeled 20 minute fire door and measure 6 feet 6 inches by 2 feet 6 inches by 1 ¾ inches thick. The door is hung on two 5 inch flat tip fully mortised pin hinges and has a brass door knob.

The storage room door is a four raised panel door in a two over two configuration. *[Photo 72]* The door measures 6 feet 4 inches by 2 feet 6 inches by 1 3/8 inches thick. The door is hung on two different style hinges, neither which are original to the opening. The lower hinge is a 5 inch round tip fully mortised hinge which has been painted so the original finish is not visible. The top hinge is a 3 ¾ inch knuckle hinge with fully mortised cast flanges. This is an older style of hinge and is missing the tips. The door

has a white ceramic door knob and black stem and a surfaced mounted lockset on the main room side. It appears this door was reused from somewhere else, perhaps not from this site as it does not match any of the other doors and hardware.

Condition:

The cloakroom doors are in fair condition, with minor nicks and blemishes. The door to the basement is in good condition. The bathroom doors are in fair condition, with minor signs of wear. The storage room door is in good condition. The mechanical room door is in good condition.

Recommendations:

- The cloakroom doors should be stripped and refinished to match the rest of the interior trim.
- Clean woodwork using vinegar and water. For especially soiled areas, mix equal parts of paint thinner and a mild soap, such as Murphy Oil Soap, and apply with a sponge or paintbrush. Wipe the solution away with a rag to clear the dirt; you'll likely remove a thin layer of varnish or shellac, too, because the grime has melded with it. Follow with a wood oil for protection.
- The existing interior door hardware should be salvaged, rehabilitated and reinstalled.

3.8. MECHANICAL SYSTEMS

3.8.1. Heating, Ventilating and Air Conditioning – General

No remnants of the original heating system are visible. There was no original ventilating or air conditioning system beyond the use of operable windows.

3.8.2. Heating System

The original heating system was a potbellied stove located in the basement according to the National Register registration form. This stove vented via the chimney on the west elevation and supposedly received coal through a coal chute which is located between the current bathrooms and has an access on the west elevation. The current furnace is a Payne PG9MAB Series A four-way multi-poise fixed capacity condensing gas furnace. The furnace is installed in an upflow orientation and is vented by a 3 inch diameter schedule 40 DMV PvC pipe. The heat is distributed through round duct work throughout the building. It runs through the crawl space and is exposed in the basement feeding the classroom through three floor grilles from below. Two returns are located in the walls near the cloakrooms. A Honeywell thermostat is wall mounted on the west wall of the classroom. It appears there is a single zone for the upper level, which would be appropriate for a building of this size.

The building is not maximized for sustainable use of energy however. There is minimal insulation in the ceiling framing above the main room and none in the walls or foundation walls. The windows are operable single pane.

Condition:

The furnace is newer and in good condition. The building is in fair condition from a sustainability standpoint however. The recommended R value is R49 to R60, which translates to approximately 16 to 20 inches of fiberglass batt insulation. The current condition is approximately 2 inches of loose fill insulation. It is not recommended to insulate side walls in wood framed historic buildings as it changes the dewpoint and the way in which a building breathes. Many insulations are not reversible, an important preservation consideration. A blower door test could be performed to identify exact locations of infiltration which can be sealed. Interior storm windows could be installed to improve the energy efficiency without impacting the historic character of the building.

Recommendations:

- Add fiberglass batt insulation to ceiling framing to improve energy efficiency of the building.
- Perform a blower door test on the building to identify infiltration areas.
- Consider the installation of interior storm windows.

3.8.3. Ventilation Systems

There are ventilation fans which are manually switched with the lights in each of the bathrooms. The windows are operable and allow for natural ventilation throughout the space.

Condition:

The ventilation fans are in good condition.

Recommendations:

- There are no recommendations for the installation of a ventilation system at this time. See the Exterior Windows sections for recommendations on rehabilitation of existing windows to maintain natural ventilation opportunities.

3.8.4. Air Conditioning Systems

There is no air conditioning in the building.

Recommendations:

- There are no recommendations for the installation of air conditioning at this time.

3.8.5. Water Service, Plumbing and Sewer Utilities

Originally there was no running water in the schoolhouse. A hand pump was located north of the building, roughly near the current pump house. Water was brought into the building between 1950 and 1953. Flush toilets were installed then, and as this was a relatively new feature to many of the children, some training was needed according to the recollections by Ms. Wickham. The water heater was installed in 2009. It is an electric GE 40 gallon tank with copper piping. Plumbing fixtures throughout the building are non-original and consist of two toilets, one hand sink, one utility sink, one children's height hand sink and one children's height drinking fountain. The water is provided from the well located immediately north of the building. The School does not own the water rights for the property, but has a 99 year lease on them. There is a water shut off located near the crawl space access in the basement. The septic tank is located south of the basement door and is accessed via a manhole in the service drive. The tank is described by the Owners as small and is pumped frequently.

Condition:

The water service, plumbing and septic system are in good condition. Please refer to the accessibility portion of this assessment for recommendations related to replacement of existing fixtures for accessibility purposes.

Recommendations:

- There are no recommendations for the water service, plumbing and septic system beyond those required for accessibility and described in that section.

3.8.6. Fire Suppression – Sprinklers

There is no fire suppression system in the building.

Recommendations:

- There are no recommendations for the fire suppression system at this time. As the collection becomes more valuable, the owner may want to consider a fire suppression system in the long term. Any fire suppression system installed should be installed in such a way as to minimize damage to historic materials and with minimal visual intrusion.

3.9. ELECTRICAL SYSTEM

3.9.1. Electrical Service and Panels, Electrical Distribution and Branch Circuit Wiring

The electrical system has been updated over time. The electrical weatherheads and meters are located on the south side of the building, near the basement door. A GE heavy duty safety switch is located on the south side of the building as well. An older electric breaker panel is located next to the fire alarm control panel on the main floor in the

classroom. This panel consists of four on/off switches and has no cover. It is not known if it is active. The main electrical panel is located in the basement. The main panel has a GE 120/240 volt three wire single phase service. The electrical service is provided by the Intermountain Rural Electric Association (IREA). The panel has two spare circuits. The panel serves the hot water heater, receptacles, utility room, heat tape, basement lights, emergency lights and outside high power sodium lights. The fire alarm circuit is in red. All of the receptacles are surface mounted with surface run rigid conduits. Typically the outlets are three prong, indicating grounded outlets, but it is unknown if each outlet is grounded appropriately.

Condition:

The electrical service and panels, distribution and branch circuit wiring are in good condition.

Recommendations:

- There are no recommendations for the electrical service and panels, distribution and branch circuit wiring. An electrician should be consulted prior to any changes to the distribution or loading of the system.

3.9.2. Lighting

There are abandoned older exterior light fixtures at all four corners of the schoolhouse. There are modern square exterior light fixtures mounted around the building as emergency egress lighting. Exit lights are located over each exterior door. The first floor is illuminated with four egg crate fluorescent fixtures, three have three 2 by 4 modules, the fourth has four 2 by 4 modules. These fixtures are ceiling mounted. The cloakrooms have ceiling mounted exposed bulb light fixtures. The light switch nearest the main door is located at 5 feet above the floor, presumably so preschoolers could not turn the lights on and off at will. A light timer is located in the basement, presumably for security purposes. The main room in the basement has two ceiling mounted fluorescent strip fixtures each consisting of two 1 by 4 two bulb strips. Incandescent fixtures are ceiling mounted in the other rooms of the basement, and wall mounted above the sink. Originally, according to recollections by former student Irene W. Wickham, there were schoolhouse type fixtures in the main room. She does not mention fixtures in other rooms, but it is unlikely any of the remaining fixtures are original.

Condition:

The lighting is in good condition, but generally is not appropriate to the historic character of the building, especially in the main room. The exterior lighting appears to be sufficient for safety needs. The original exterior light fixtures are historically appropriate and should remain.

Recommendations:

- Replace main room lighting with schoolhouse fixtures similar to those described by Ms. Wickham.
- Lighting in secondary rooms can remain. Replace incandescent bulbs with LED or compact fluorescent bulbs.
- The exterior light fixtures could be re-wired if there was a desire to have them functional, but this is not necessary for safety.

3.9.3. Fire Detection System

There is a fire alarm control panel located in the main classroom. The fire alarm system was installed in 2006 according to the manual and binder located with the panel. The panel is a Notifier NFS-640 intelligent fire alarm control panel designed specifically for mid-size applications with features that minimize installation time, enable faster response times, and simplify maintenance and usability. Pull stations are located next to each door and emergency fire alarm strobes are installed throughout the building. Hardwired fire detectors are found throughout the ceilings. Wall mounted fire extinguishers are also present.

Condition:

The fire alarm system is in good condition. However, the cost of the two phone lines required for the Notifier system is prohibitive for the new ownership, and since there are no longer children occupying the building, it is probably overkill for the new usage of the building.

Recommendations:

- Contact the fire alarm system manufacturer and see if it would be possible to connect the fire alarm system to an exterior strobe rather than the phone lines.

3.9.4. Security Alarm System

There is no security system in the building.

Recommendations:

- There are no recommendations for the security system at this time. As collections grow and become more valuable, a security system may be desired by the owners. Security systems should be installed to minimize damage to historic features and limit visual aesthetic intrusions.

4. PART IV. ANALYSIS AND COMPLIANCE

4.1. HAZARDOUS MATERIALS – SUMMARY

A specific hazardous materials survey was not included as part of the scope of this assessment. No previous hazardous materials surveys could be accessed.

Since the building was constructed prior to the discontinuation of the manufacture of lead-based paints, it would be prudent to assume that lead based paint is present. The highest likelihood is that lead-based primers and finish coats were used on interior drywall surfaces, and painted interior woodwork and trim. Interior woodwork and trim finished with transparent finishes, like stain and varnish, are probably not lead-based. However, minor traces of lead may be present due to the use of driers in oil based finishes. There is a high likelihood that lead based paint may also be present on exterior painted wood surfaces including windows and trim. Any future maintenance procedures or construction activities that would involve sanding or heating existing interior and exterior paint coatings should take into account the possible presence of lead based paints. Therefore, any hazardous material testing survey should include sampling of existing painted surfaces. The more recent upper coats of paint should be lead free.

Asbestos is presumed to be present in the drywall and possibly in the window glazing putty. Early sheetrock as found throughout the schoolhouse was created by the United States Gypsum Company (USGC). It is made primarily out of plaster, but for years it also contained asbestos, which helped to strengthen the boards. Gypsum did very well with this product, and it was used in structures all over the nation. The very name Sheetrock became synonymous with drywall, even though it was actually a trademark of the company that created it. However, in 1994, USGC was sued by claimants who were harmed by the asbestos in the products the company manufactured. Sheetrock containing asbestos is still in place in buildings throughout the United States. As long as they remain completely intact, the boards are safe but if they are drilled into, exposed to water damage, or otherwise deteriorate, microscopic asbestos particles can be released. None of these materials are of immediate concern if in good condition, and none of them are considered friable. However, general wear and tear and many of the activities recommended by this assessment may disturb potentially asbestos containing materials. Asbestos containing materials that are determined to be friable must be abated by a professional abatement service.

Mouse droppings were seen throughout the interior of the Barn. According to the Centers for disease Control and Prevention (CDC), several diseases are either directly or indirectly transmitted by rodents. Hantavirus Pulmonary Syndrome is spread by breathing in dust that is contaminated with rodent urine or droppings and direct contact with rodents or their urine and droppings. This disease occurs throughout Colorado and is spread primarily by the deer mouse, the cotton rat, the rice rat and the white-footed mouse. Leptospirosis and Lymphocytic chorio-meningitis are also spread by rodents and spread by contact through the skin or mucous membrane with water or soil that is contaminated with the urine from infected animals, direct contact or breathing dust contaminated by urine or droppings. These diseases occur worldwide.

Recommendations:

- The CDC recommends sealing up holes inside and outside the building, trapping rodents and removing food and water that could attract rodents.
- Take precautions before and during clean up of rodent-infested areas. Before cleaning, trap the rodents and seal up any entryways to ensure that no rodents can

- get in. Continue trapping for a week. If no rodents are captured, the active infestation has been eliminated and enough time has passed so that any infectious virus in the rodent's urine/droppings or nesting material is no longer infectious.
- Before attempting to clean cabins, sheds, barns, or other outbuildings, open all doors and windows for 30 minutes. This will allow fresh air to enter the work area.
 - Wear rubber, latex, or vinyl gloves and clean up all rodent urine, droppings, nests, and dead rodents using disinfectant or mixture of bleach and water.
 - Mop floors or spray dirt floors with a disinfectant or mixture of bleach and water.
 - Clean countertops, cabinets, and drawers with a disinfectant or a mixture of bleach and water.
 - Consult a hazardous material removal specialist before undertaking any work within the schoolhouse, interior or exterior.

4.2. MATERIALS ANALYSIS

No materials analysis was completed as a part of this historic structure assessment. Paint analysis could be performed on the exterior siding and trim to determine if there was ever another color scheme than white on white.

Recommendations:

- Mortar analysis is recommended prior to any repairs on the stone chimney.
- Paint analysis should be performed on exterior wood substrates.

4.3. ZONING CODE COMPLIANCE

The schoolhouse is located in unincorporated Jefferson County. The surrounding properties are all zoned A2. There is no information on whether or not a museum is an accepted use for the building. The Owner should contact Jefferson County for more information.

4.4. BUILDING CODE COMPLIANCE

The Building Code analysis was based on a review of the building during which the building's construction, layout and condition were observed and current physical conditions and problems evaluated. During the on-site observations, the general condition and arrangement of the building's life safety and egress features were reviewed. Measurements of stair and net door widths were made. Restrictions in the direction of travel were noted. The type, configuration and condition of exit door hardware were noted. The purpose of the on-site observations was to compile information regarding the existing conditions to allow an analysis of the existing building and the subsequent identification of serious code compliance deficiencies.

The building code analysis compared existing physical conditions and the current and expected uses of the Little White Schoolhouse with the 2009 International Building Code (IBC) and the 2009 International Existing Building Code (IEBC). Conifer is an

unincorporated community in Jefferson County. Jefferson County uses the 2009 IBC. Jefferson County plans to use the 2012 IBC starting January 2014, but since it has yet to be adopted, this analysis was completed under the currently accepted code.

Findings: The building is approximately 37 feet 6 inches wide at its widest point by 44 feet 6 inches long, consisting of the basement and first floor. The exterior walls are of light frame wood construction with wood floor structures. This type of construction is approximately equivalent to what is known as Type V construction in the 2009 IBC. The drywall and sheetrock on the walls and ceilings, although not specifically carrying a rating, does provide some protection which is approximately equivalent to one-hour rating.

For the purposes of assessing code compliance, the exterior of the building is in acceptable condition. The occupied areas of the building are in acceptable condition. The building is structurally sound and is generally performing its intended purpose. The interior is sound and functional. There are some signs of wear and minor deterioration in the interior's elements and surfaces.

Unsafe Conditions: Section 116 of the IBC describes the minimum standards for existing buildings related to life safety and emergency egress, structural safety, weather protection and other safety features. According to Section 116, the Little White Schoolhouse satisfies the intent of the building code. Accordingly, all elements of the existing system must be of sufficient size, width and arrangement to provide safe and adequate egress. The IBC requires at least two exits for the building, the existing building currently meets those minimum requirements.

Analysis: The following information describes the building in terms of its area, height, general construction type, and occupancy for comparison with the current building code. The tabulated data shows that the building is in general conformance with the current code for its construction type and occupancy classification, for area, number of stories and heights.

Building Area:

Existing building footprint

Basement:	700 sq. ft.
First floor:	1,660 sq. ft.
Total:	2,360 sq. ft.

Building Height:

From top of parapet to average grade at perimeter: under 40 feet as allowed by code

Construction Type: V

Occupancy: A-3

Allowable Building Area: 6,000 sq. ft.

Allowable Building Height: 40 feet

Occupant Loads and Exiting Calculations:

First Floor:	1,275 sq. ft. / 15 sq. ft. per person	85 people
Basement:	700 sq. ft. / 300 sq. ft. per person	2 people
Total:		87 people

A minimum of two exits are required for the first floor; 2 existing exit paths are provided. A minimum of two exits are required by the current code for the basement if it is to be occupied, only one exit path is provided. The exiting requirement from the first floor was based on .2 inches/ per person for required exit door widths and .3 inches/ per person for required stair widths. The width requirements are not cumulative. None of the exit paths are accessible. Occupant loads under 50 require only a 36 inch wide minimum exit path. This is provided.

Occupancy Separations: No occupancy separations are required and none are provided.

Plumbing Fixture Requirements:

Water Closets	1 per 125 men / 1 per 65 women	1 each
Lavatory	1 per 200	1 each
Drinking Fountain		1 each
Service Sink		1 each

Change of Occupancy: The Existing Structures Chapter 34 applies to existing building and Section 3408 addresses Change of Occupancy “No change shall be made in the use of occupancy of any building that would place the building in a different division of the same group of occupancies or in a different group of occupancies, unless such building is made to comply with the requirements of this code for such division of group of occupancies. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous based on life and fire risk, than the existing use. Section 3411.4.2 addresses a complete change of occupancy and requires the following accessible features: “At least one accessible building entrance; at least one accessible route from an accessible building entrance to primary function areas; signage complying with Section 1110; Accessible parking where parking is being provided; at least one accessible passenger loading zone, when loading zones are provided; at least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance. Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.”

4.5. ACCESSIBILITY COMPLIANCE

Section 310 of the IEBC describes the requirements for accessibility for existing buildings. Section 310.4 addresses changes of occupancy for the whole building. A building with complete change of occupancy requires at least one accessible building entrance, at least one accessible route from an accessible building entrance to primary function areas, appropriate building signage, accessible parking with at least one accessible passenger loading zone and a route between the parking and the entrance. Where it is "...technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible." Also, at least one accessible family or assisted-use toilet room shall be provided.

The building will be considered a place of public accommodation by the Americans with Disabilities Act (ADA). The ADA Title III regulations cover places of public accommodation, including historic properties. Title III also requires physical barriers to accessibility in existing buildings to be removed when that is "readily achievable." There are a number of physical barriers to accessibility in the building that will require modification to satisfy Title III. An ADA accessibility review was conducted as a part of the Historic Structure Assessment and the following items were identified:

In their current state, the site and schoolhouse are largely inaccessible to the disabled. The existing sidewalks are too narrow to be part of an accessible path to the schoolhouse, and no paved path connects the school with the other buildings on site. The modular building is the sole building for which accessibility accommodations have been made, with the addition of a ramp leading from the one handicapped spot in the parking lot. The main door to the schoolhouse is located at the top of a small flight of stairs, with no ramp providing accessibility. The southwest section of the parking lot is located at the bottom of a slope from the main parking area, and the basement door is located on the south elevation of the schoolhouse, just off this lower parking area. While the basement level of the schoolhouse is accessible via this door, there is no ramp or elevator providing access to the main level of the building. The restrooms are not accessible, but could be modified for accessibility if the lower level was made accessible via the door on the south. The existing toilet rooms are not large enough to be modified, so the whole basement area would need to be redesigned. The doors clearances and hardware are also not compliant.

Recommendations:

- Consider the creation of a 6 foot by 8 foot accessible toilet room, encompassing the existing girls' toilet room and the storage area beneath the stairs. This will keep the plumbing in the same general location and will be the most cost effective and least impactful location for an accessible toilet room within the building. The drive to the south of the building is too steep for accessible usage, but a parking spot could be designated in the south drive and a designated path created to the basement door. The basement door hardware and threshold would need to be replaced to create an accessible path into the building.

- Consider the creation of a portable ramp to enable those with disabilities access to the schoolhouse through the main entry door.
- Widen sidewalks along accessible path to 5 feet wide.

5. PART V. PRESERVATION PLAN

5.1. PRESERVATION APPROACH

The Secretary of the Interior's Standards for the Treatment of Historic Properties describes several treatment approaches for historic buildings. The treatment approaches are: preservation, rehabilitation, restoration and reconstruction.

Preservation focuses on the maintenance and repair of existing historic materials and retention of a historic property's form as it has evolved over time. Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Preservation is appropriate as a treatment when the property's distinctive materials, features and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; when depiction at a particular period of time is not appropriate; and when a continuing or new use does not require additions or extensive alterations. Preservation is an appropriate treatment for the exterior as it has remained largely intact for its lifetime.

Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural or architectural values. Rehabilitation is appropriate as a treatment when repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate. Rehabilitation is the most appropriate treatment for the Little White Schoolhouse because of the changing use and the lack of information to be able to depict the building at a particular period of time.

The standards for rehabilitation are:

1. A property will be used as it was historically or be given a new use that requires minimal changes to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment will be unimpaired.

Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods. Restoration is defined as the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project. Restoration is not appropriate for the Little White Schoolhouse as it would be cost prohibitive and specific information is lacking for restoring to any set time in the building's history.

Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes. Reconstruction would not be an acceptable choice for the property as no major missing elements are known in enough detail to be recreated.

5.2. PRIORITIZED WORK PLAN

Introduction: The purpose of this preservation plan is to organize the physical repair, maintenance and rehabilitation needs of the building into a prioritized approach which will allow the owners to anticipate and plan for repair, rehabilitation and major maintenance costs. Each problem condition discovered during the building condition

assessment is evaluated and positioned according to its severity and impact on the long-term conservation of the building, the safety of its occupants and the continued use of the building. Recommended repair, rehabilitation and maintenance work is prioritized and organized into the following categories according to their relative urgency and importance.

Critical Deficiencies: This category includes deficiencies that should be corrected within 2 years. If repairs are not made immediately, serious additional damage to the building or potential injury to the building's occupants or passerby is likely to occur. Work which would be classified as critical deficiencies include masonry components which have deteriorated to the point where pieces could fall and injure the building's occupants and/or passerby, serious active roof leaks that could quickly damage the building or its contents, hazardous electrical conditions, hazardous building egress conditions and the like. Critical building code and related life safety deficiencies are also included in this category.

Serious Deficiencies: This category includes deficiencies that should be corrected as soon as possible after all critical deficiencies have been corrected. This category includes work in areas where continuing damage to the building is likely unless the problems are repaired. Serious deficiencies could become critical deficiencies if not corrected in 2 to 5 years. Work which would be classified as serious deficiencies includes repair of roof leaks and conditions likely to result in roof leaks, repair work which will prevent significant and rapid additional deterioration of building components and systems, etc.

Minor Deficiencies: This category includes deficiencies that should be corrected but not before all deficiencies in the critical and serious categories has been completed. Minor deficiencies have the potential of becoming serious if not corrected and resolved within the next 5 to 10 years.

Routine Repair and Maintenance Work: This category includes repair work that should be done on a routine and continuous basis. If routine repair and maintenance is not completed, building components and systems can deteriorate into critical or serious deficiencies. This category includes repair and maintenance work such as painting, mechanical system maintenance to boilers, etc., hardware maintenance, roofing and flashing inspections, etc.

Discretionary Work: Discretionary work includes work that is not necessary but may be desired. Discretionary work could include work like the restoration of original finishes and features that have been lost due to past renovation work, additional architectural lighting, etc. Discretionary work should not be undertaken until all critical and serious deficiencies have been corrected. Furthermore, it is not wise to defer routine repairs and maintenance in order to pursue discretionary work.

The repair recommendations included in the building condition assessment are further defined, organized and placed in the prioritized work categories below. Work items are arranged in order of their relative priority. Highest priority items are listed first.

Estimated costs are for 2014-2015. Escalation to future years is not included due to uncertainty of actual timing of work.

The estimated project costs presented in this assessment and preservation plan were developed using a parameter methodology, based on very preliminary information, to result in a general order of magnitude of probable cost. The individual line items are based on general assumptions and should not be analyzed on a line by line basis.

When reviewing the following estimate of probable construction costs, it should be understood that the preparer of this information has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing. The estimates of probable construction costs provided herein are opinions and are made on the basis of the preparer's qualifications and experience. No warranty is expressed or implied as to the accuracy of such opinions as compared to bid or actual costs.

5.2.1. Critical Deficiencies (Action Required within 2 Years)

The following critical deficiencies should be corrected within 2 years:

- Monitor existing cracks in the schoolhouse and barn foundations for signs of movement. (Schoolhouse and Barn)
- Monitor the crack along the North side of the chimney for signs of movement (Schoolhouse)
- Replace the fence to meet current code requirements in terms of height and spacing of pickets. (All buildings)
- Patch exterior surface of the eroded concrete and paint on the schoolhouse foundation. (Schoolhouse)
- Infill repairs of missing concrete in the barn foundation as indicated in the assessment. (Barn)
- Replace the sill plate if further investigation indicates water damage. Repair any framing which is also shown to have damage. (Barn)
- Trussed rafters should be strengthened at each panel point. (Barn)
- Sister the header over the door to provide further support for the trussed rafter. (Barn)
- Repoint crack and replace minor areas of lost mortar in the chimney. Perform mortar analysis prior to repointing areas of deterioration. (Schoolhouse)
- Swales should be created several feet from the north foundation on both the barn and the schoolhouse to promote drainage away from the building. (Schoolhouse and Barn)
- Remove soil from directly touching the water table board and repair water table board as recommended in the exterior materials section. (Schoolhouse)
- Provide sufficient slope away from the building foundation and the north side of the chimney. The grade should slope positively 6 inches in the first 10 feet. (Schoolhouse)
- Provide a culvert or surface linear drain to prevent erosion of the asphalt along the southwest section of the lot. (All buildings)

- Damaged rafter tails should be repaired with epoxy consolidant where necessary. (Schoolhouse)
- Repair or replace porch deck boards that are damaged. Sand and repaint the porch following instructions indicated in the assessment. (Schoolhouse)
- Replace the gutter to the north of the chimney, ensuring it extends all the way to the chimney. (Schoolhouse)
- Provide a sheet metal saddle that will encourage drainage off the north side of the chimney where it intersects the roof. (Schoolhouse)
- Remove the unused vent which extends up the north side of the chimney. Close and seal the opening. (Schoolhouse)
- Replace cracked and missing putty on windows and doors. Match existing composition and color as closely as possible. (Schoolhouse)
- Joints around each window should be sealed with a high quality elastomeric sealant on the exterior. (Schoolhouse)
- The threshold for the south cloakroom door should be replaced. (Schoolhouse)
- See Hazardous Materials portion of this assessment for proper handling of mouse droppings found in the barn. (Barn)
- Consult a structural engineer if the building's usage is changed. (Schoolhouse and Barn)
- Paint analysis should be performed on exterior wood substrates. (Schoolhouse and Barn)
- Repair gutters on the pump house, or replace them with metal gutters and downspouts that are able to withstand heavy snow (Pump House)
- Contact the fire alarm system manufacturer and see if it would be possible to connect the fire alarm system to an exterior strobe rather than the phone lines.
- Control rodent infestation into all buildings.

5.2.2. Serious Deficiencies (Action Required 2 – 5 Years)

Serious deficiencies should be corrected after all critical deficiencies have been corrected and within the next 2 to 5 years.

- Damaged trim boards and siding on the schoolhouse and barn should be repaired or replaced with like material. (Schoolhouse and Barn)
- Caulk gaps in barn siding where water is currently allowed to penetrate. (Barn)
- Fill gaps around the windows on the barn where the siding has been cut to accommodate window installation. (Barn)
- After all repairs have been completed on the schoolhouse, pump house and barn, repaint the buildings as described in the assessment. (Schoolhouse, Pump House and Barn)
- Damaged or missing door parts should be repaired using consolidant or replaced. (Schoolhouse)
- Cracked or missing raised panels should be replaced with new milled panels. (Schoolhouse)
- Doors should be stripped and repainted or refinished. (Schoolhouse)

- Cracked and missing putty should be replaced on the north door. (Schoolhouse)
- Repair the existing original windows and put in operating condition. Consolidate or replace broken window parts. Repaint windows after repairs are complete. (Schoolhouse)
- Replace broken or heavily damaged panes on windows and doors. (Schoolhouse)
- Add fiberglass batt insulation to ceiling framing to improve energy efficiency of the building. (Schoolhouse)

5.2.3. Minor Deficiencies (Action Required 5 – 10 Years)

- Repair inoperable windows by replacing broken sash cords and replacing or consolidating broken stops and stiles. Returning the upper sashes to operable condition is not necessary. (Schoolhouse)
- Remove excess mulch and re-grade play area to allow for a lower play yard that doesn't get in the way of the view on approach. (All buildings)
- The missing window in the main entry door should be replaced. (Schoolhouse)
- Strip wainscot, chair rail and trim upstairs based on the color/finish of trim in the cloakrooms for final aesthetic. (Schoolhouse)
- Replace missing sections of chair rail in the main classroom, and finish to match trim in the cloakrooms. (Schoolhouse)
- Replace or repair damaged wainscot on the main level and finish to match trim in the cloakrooms. (Schoolhouse)
- Remove the stub of the partition wall on the east wall. (Schoolhouse)
- Patch the location of the removed partition wall and paint to match adjacent. (Schoolhouse)
- Replace missing crown molding and paint to match adjacent. (Schoolhouse)
- Remove the carpet from the north half of the main classroom. (Schoolhouse)
- Sand and refinish the main classroom floor. Use of a random orbital sander may be the best choice due to the thinness of the existing flooring. Match the finish to the cloakroom materials. (Schoolhouse)
- The cloakroom doors should be stripped and refinished to match the rest of the interior trim. (Schoolhouse)
- Clean woodwork using vinegar and water. For especially soiled areas, mix equal parts of paint thinner and a mild soap, such as Murphy Oil Soap, and apply with a sponge or paintbrush. Wipe the solution away with a rag to clear the dirt; you'll likely remove a thin layer of varnish or shellac, too, because the grime has melded with it. Follow with a wood oil for protection. (Schoolhouse)
- The existing interior door hardware should be salvaged, rehabilitated and reinstalled. (Schoolhouse)
- After all repairs have been completed, all loose existing paint should be removed, the substrates scraped to a smooth surface and repaired with epoxy consolidant where necessary, primed and repainted. All wood surfaces should be primed with a high-quality oil-based wood primer and then top coated with two coats of acrylic latex or oil-alkyd paint. Investigation into the original paint scheme of the building should be conducted prior to selecting a new paint scheme. It is desirable to reproduce the original paint scheme if it can be determined.

5.2.4. Routine Repair Work

Routine normal maintenance work such as lamp replacements, cleaning procedures, etc. is not included in this category. This category includes repair work that occurs on a periodic basis or deferred repair work that can be completed in increments, such as painting, sealing, etc.

- As part of the routine maintenance and repair of the structure, a regular, periodic inspection program should be established. Inspections should include the following procedures (All buildings):

Inspect the existing foundation walls for signs of cracking, differential movement and damage caused by water intrusion on an annual basis.

Replace broken window glass with new glass matching the thickness and general appearance of the existing glass as soon as possible after noticing the breakage.

Perform routine maintenance on operable components of interior and exterior door hardware. Maintain the exterior surfaces of the doors by painting when necessary. Replace hardware components with matching units as they wear out.

Remove vegetation from close adjacency to foundation.

Protect surrounding original materials when any work such as painting, sealing or refinishing is performed. Original materials should also be protected from posting or hanging materials from them.

Control pest infestation. Particular attention should be paid to rodents such as mice as several diseases are either directly or indirectly transmitted by rodents.

5.2.5. Discretionary Work

- Consider waterproofing the exterior of the north foundation wall of the barn. (Barn)
- Consider restriping the parking lot to provide for a more organized usage of the space. (All buildings)
- Investigation into the original paint scheme of the building should be conducted prior to selecting a new paint scheme. It is desirable to reproduce the original paint scheme if it can be determined. (Schoolhouse)
- Perform a blower door test on the building to identify infiltration areas. (Schoolhouse)
- Consider the installation of interior storm windows. (Schoolhouse)
- Replace main room lighting with schoolhouse fixtures similar to those described by Ms. Wickham. (Schoolhouse)

- Replace incandescent bulbs with LED or compact fluorescent bulbs. (Schoolhouse)
- Restore barn door with glazed safety glass and hardware that makes sense to the usage of the building. (Barn)
- Create a 6 foot by 8 foot accessible toilet room, encompassing the existing girls' toilet room and the storage area beneath the stairs. This will keep the plumbing in the same general location and will be the most cost effective and least impactful location for an accessible toilet room within the building. The drive to the south of the building is too steep for accessible usage, but a parking spot could be designated in the south drive and a designated path created to the basement door. The hardware and threshold would need to be replaced to create an accessible path into the building. (Schoolhouse)
- Consider the creation of a portable ramp to enable those with disabilities access to the schoolhouse through the main entry door. (Schoolhouse)
- The exterior light fixtures could be re-wired if there was a desire to have them functional, but this is not necessary for safety. (Schoolhouse)
- Widen sidewalks along accessible path to 5 feet wide. (All buildings)

5.2.6. Associated Work

General conditions costs, bonds and insurance, design consulting fees, project contingencies, and related associated costs are not included above. These costs are added below in the proposed phasing plan.

5.3. PHASING PLAN

The phasing plan organizes the work identified in the prioritized plan into discreet funding phases. The funding phases can be coordinated with a State Historical Fund grant application and the Owner's own fund raising efforts. The proposed phasing plan addresses the structure's preservation needs for the next 10 to 15 years.

The primary goal for the phasing plan is to complete the physical repair and rehabilitation needs of the structure to ensure its long-term preservation as a historic resource. A grant can be an integral part to implementation of the preservation plan. The Owner can supplement its own funding of the project by applying for a grant from the State Historical Fund. The following describes one possible phasing approach and the projected costs for the project with that approach. Not all items in each phase listed will be eligible for SHF monies.

Phase One: The first phase includes the repair of critical deficiencies that should be completed as soon as possible as well as exterior preservation issues that will continue to deteriorate until the work is accomplished:

Subtotal:	\$34,850.00
Consulting Fees:	\$5,227.50
General Conditions:	\$8,712.50

15% Contingency:	\$7,318.50
PHASE TOTAL:	\$56,108.50

Phase Two: The second phase includes the items that will be needed for all buildings to remedy the serious deficiencies:

Subtotal:	\$44,662.50
Consulting Fees:	\$6,699.38
General Conditions:	\$11,165.63
15% Contingency:	\$9,379.13
PHASE TOTAL:	\$71,906.63

Phase Three: The second phase includes the items that will be needed for all buildings to remedy the minor and discretionary deficiencies:

Subtotal:	\$44,120.00
Consulting Fees:	\$6,618.00
General Conditions:	\$11,030.00
15% Contingency:	\$9,265.20
PHASE TOTAL:	\$71,033.20

5.4. ESTIMATED COSTS

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Project: Little White School House			Date: July 2015	
Description: Critical Items			Sheet: 1	
Estimated: MRS			Of: 2	
WORK ITEM	UNIT COST	UNIT MEASURE	QUANTITY	TOTAL
DIVISION 1 - GENERAL REQUIREMENTS				
Crack Monitoring	\$ 500.00	EA	1	\$ 500.00
Hazardous Materials Consultation	\$ 2,500.00	EA	1	\$ 2,500.00
Archaeological Monitoring	\$ 4,000.00	EA	1	\$ 4,000.00
Mortar Analysis	\$ 1,200.00	EA	1	\$ 1,200.00
Paint Analysis	\$ 750.00	EA	1	\$ 750.00
Perform Blower Door Test	\$ 250.00	EA	1	\$ 250.00
DIVISION 2 - EXISTING CONDITIONS				
Clean Mouse Droppings	\$ 1,750.00	EA	1	\$ 1,750.00
DIVISION 3 - CONCRETE				
Infill Corners of Barn Foundation	\$ 45.00	SF	50	\$ 2,250.00
Patch exterior surface of school house foundation	\$ 5.00	SF	100	\$ 500.00
DIVISION 4 - MASONRY				
Repoint Chimney	\$ 15.00	LF	50	\$ 750.00
DIVISION 5 - METALS				
Remove Unused Vent Near Chimney	\$ 2,500.00	EA	1	\$ 2,500.00
DIVISION 6 - WOOD, PLASTICS, COMPOSITE				
Replace Fencing	\$ 20.00	LF	200	\$ 4,000.00
Replace Sill Plate at Barn	\$ 50.00	LF	20	\$ 1,000.00
Repair Damaged Framing at Barn	\$ 50.00	LF	48	\$ 2,400.00
Repair Damaged Rafter Tails	\$ 250.00	EA	10	\$ 2,500.00
Replace Porch Boards	\$ 6.00	SF	50	\$ 300.00
DIVISION 7 - THERMAL & MOISTURE PROTECTION				
Caulk Joints at Windows	\$ 35.00	EA	10	\$ 350.00
Replace Cracked and Missing Putty	\$ 20.00	EA	10	\$ 200.00
Replace Gutter to Extend to Chimney	\$ 125.00	LF	4	\$ 500.00
Provide Sheet Metal Saddle at Chimney	\$ 500.00	EA	1	\$ 500.00
Replace Gutters and Downspouts (Pump House)	\$ 10.00	LF	80	\$ 800.00
DIVISION 8 - OPENINGS				
DIVISION 9 - FINISHES				
Replace Threshold at South Cloakroom	\$ 150.00	EA	1	\$ 150.00
DIVISION 10 - SPECIALTIES				
DIVISION 11 - EQUIPMENT				
DIVISION 12 - FURNISHINGS				
DIVISION 13 - SPECIAL CONSTRUCTION				
DIVISION 14 - CONVEYING EQUIPMENT				
DIVISION 21 - FIRE SUPPRESSION				
DIVISION 22 - PLUMBING				
DIVISION 23 - HVAC				
DIVISION 25 - INTEGRATED AUTOMATION				
DIVISION 26 - ELECTRICAL				
DIVISION 27 - COMMUNICATIONS				

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DIVISION 28 - ELECTRONIC SAFETY AND SECURITY				
DIVISION 31 - EARTHWORK				
Provide Culvert	\$ 2,500.00	EA	1	\$ 2,500.00
Provide Linear Drain at Drive	\$ 15.00	LF	12	\$ 180.00
Provide Swale at North Elevation of School	\$ 40.00	SF	30	\$ 1,200.00
Provide Swale at North Elevation of Barn	\$ 40.00	SF	20	\$ 800.00
Remove Soil in Direct Contact with Water Table	\$ 4.00	SF	30	\$ 120.00
Regrade North Side of Chimney	\$ 40.00	SF	10	\$ 400.00
DIVISION 32 - EXTERIOR IMPROVEMENTS				
DIVISION 33 - UTILITIES				
DIVISION 34 - TRANSPORTATION				
SUBTOTAL A				\$ 34,850.00
CONSULTING FEES	15% EA		1	\$ 5,227.50
GENERAL CONDITIONS	25% EA		1	\$ 8,712.50
SUBTOTAL B				\$ 48,790.00
CONTINGENCY	15% EA		1	\$ 7,318.50
TOTAL PROBABLE PROJECT COST				\$ 56,108.50

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Project: Little White School House			Date: July 2015	
Description: Serious Items			Sheet: 1	
Estimated: MRS			Of: 2	
WORK ITEM	UNIT COST	UNIT MEASURE	QUANTITY	TOTAL
DIVISION 1 - GENERAL REQUIREMENTS				
DIVISION 2 - EXISTING CONDITIONS				
DIVISION 3 - CONCRETE				
DIVISION 4 - MASONRY				
DIVISION 5 - METALS				
DIVISION 6 - WOOD, PLASTICS, COMPOSITE				
Replace Missing Trim Boards at School	\$ 7.00	LF	50	\$ 350.00
Replace Damaged Trim Boards at Barn	\$ 7.00	LF	20	\$ 140.00
Repair Damaged Siding at Barn	\$ 10.00	SF	200	\$ 2,000.00
Prepare, prime and paint woodwork	\$ 1.50	SF	2700	\$ 4,050.00
Repair Gaps in Siding Around Windows at Barn	\$ 150.00	EA	10	\$ 1,500.00
Repair Water Table Board	\$ 7.00	LF	30	\$ 210.00
DIVISION 7 - THERMAL & MOISTURE PROTECTION				
Caulk Gaps in Siding at Schoolhouse and Barn	\$ 2.00	LF	50	\$ 100.00
Install Ceiling Insulation	\$ 1.50	SF	1275	\$ 1,912.50
DIVISION 8 - OPENINGS				
Replace Missing Door Parts	\$ 500.00	EA	4	\$ 2,000.00
Restore Windows at Barn	\$ 1,200.00	EA	4	\$ 4,800.00
Replace Missing Window in Main Entry Door	\$ 400.00	EA	1	\$ 400.00
Restore Door at Barn	\$ 2,000.00	EA	1	\$ 2,000.00
Restore Schoolhouse Windows	\$ 1,700.00	EA	10	\$ 17,000.00
Replace Cracked and Missing Putty	\$ 20.00	EA	10	\$ 200.00
Strip and Refinish Doors	\$ 1,300.00	EA	2	\$ 2,600.00
Replace Cracked Door Panels	\$ 500.00	EA	4	\$ 2,000.00
Strip and Refinish Cloakroom Doors	\$ 1,200.00	EA	2	\$ 2,400.00
DIVISION 9 - FINISHES				
DIVISION 10 - SPECIALTIES				
DIVISION 11 - EQUIPMENT				
DIVISION 12 - FURNISHINGS				
DIVISION 13 - SPECIAL CONSTRUCTION				
DIVISION 14 - CONVEYING EQUIPMENT				
DIVISION 21 - FIRE SUPPRESSION				
DIVISION 22 - PLUMBING				
DIVISION 23 - HVAC				
DIVISION 25 - INTEGRATED AUTOMATION				
DIVISION 26 - ELECTRICAL				
Miscellaneous Electrical Associated with Work	\$ 1,000.00	EA	1	\$ 1,000.00
DIVISION 27 - COMMUNICATIONS				
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY				
DIVISION 31 - EARTHWORK				
DIVISION 32 - EXTERIOR IMPROVEMENTS				
DIVISION 33 - UTILITIES				
DIVISION 34 - TRANSPORTATION				

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SUBTOTAL A			\$ 44,662.50
CONSULTING FEES	15% EA	1	\$ 6,699.38
GENERAL CONDITIONS	25% EA	1	\$ 11,165.63
SUBTOTAL B			\$ 62,527.50
CONTINGENCY	15% EA	1	\$ 9,379.13
TOTAL PROBABLE PROJECT COST			\$ 71,906.63

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Project: Little White School House			Date: July 2015	
Description: Minor and Discretionary Items			Sheet: 1	
Estimated: MRS			Of: 2	
WORK ITEM	UNIT COST	UNIT MEASURE	QUANTITY	TOTAL
DIVISION 1 - GENERAL REQUIREMENTS				
DIVISION 2 - EXISTING CONDITIONS				
Add Portable Ramp at Exterior Main Entry	\$ 300.00	EA	1	\$ 300.00
Clean Woodwork	\$ 200.00	EA	1	\$ 200.00
DIVISION 3 - CONCRETE				
Widen Sidewalks to 5' Wide	\$ 45.00	SF	50	\$ 2,250.00
DIVISION 4 - MASONRY				
DIVISION 5 - METALS				
DIVISION 6 - WOOD, PLASTICS, COMPOSITE				
DIVISION 7 - THERMAL & MOISTURE PROTECTION				
Waterproofing at Barn Foundation	\$ 8.00	SF	80	\$ 640.00
DIVISION 8 - OPENINGS				
Install Interior Storm Windows	\$ 675.00	EA	10	\$ 6,750.00
Repair Inoperable Windows in Schoolhouse	\$ 200.00	EA	4	\$ 800.00
Rehabilitate and Reinstall Interior Door Hardware	\$ 100.00	EA	10	\$ 1,000.00
DIVISION 9 - FINISHES				
Strip Wainscot, Trim and Chair Rail and Refinish	\$ 5.00	SF	250	\$ 1,250.00
Paint Exterior at Barn	\$ 2.00	SF	500	\$ 1,000.00
Replace Missing Sections of Chair Rail	\$ 3.50	LF	50	\$ 175.00
Paint Exterior at Schoolhouse	\$ 2.00	SF	6000	\$ 12,000.00
Replace Missing or Damaged Wainscot	\$ 15.00	LF	50	\$ 750.00
Paint Porch	\$ 2.00	SF	250	\$ 500.00
Patch Location of Stub and Remove Wall	\$ 250.00	LS	1	\$ 250.00
Remove Stub of East Partition Wall	\$ 500.00	LS	1	\$ 500.00
Replace Missing Crown Molding	\$ 7.50	LF	150	\$ 1,125.00
Remove Carpet	\$ 1.00	SF	650	\$ 650.00
Refinish Flooring	\$ 4.00	SF	1275	\$ 5,100.00
DIVISION 10 - SPECIALTIES				
DIVISION 11 - EQUIPMENT				
DIVISION 12 - FURNISHINGS				
DIVISION 13 - SPECIAL CONSTRUCTION				
DIVISION 14 - CONVEYING EQUIPMENT				
DIVISION 21 - FIRE SUPPRESSION				
DIVISION 22 - PLUMBING				
Create 6' by 8' Accessable Toilet Room	\$ 60.00	SF	48	\$ 2,880.00
DIVISION 23 - HVAC				
DIVISION 25 - INTEGRATED AUTOMATION				
DIVISION 26 - ELECTRICAL				
Replace Main Classroom Lighting	\$ 250.00	EA	4	\$ 1,000.00
Replace Incandescent Bulbs with LED	\$ 50.00	EA	6	\$ 300.00
Rewire Fire Alarm System to Strobe	\$ 500.00	EA	1	\$ 500.00
DIVISION 27 - COMMUNICATIONS				

Final Report SHF Project #13-HA-033
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DIVISION 28 - ELECTRONIC SAFETY AND SECURITY				
DIVISION 31 - EARTHWORK				
Remove excess mulch and re-grade play area	\$	40.00	SF	100 \$ 4,000.00
DIVISION 32 - EXTERIOR IMPROVEMENTS				
Stripe Parking Lot	\$	0.20	LF	1000 \$ 200.00
DIVISION 33 - UTILITIES				
DIVISION 34 - TRANSPORTATION				
SUBTOTAL A				\$ 44,120.00
CONSULTING FEES		15% EA	1	\$ 6,618.00
GENERAL CONDITIONS		25% EA	1	\$ 11,030.00
SUBTOTAL B				\$ 61,768.00
CONTINGENCY		15% EA	1	\$ 9,265.20
TOTAL PROBABLE PROJECT COST				\$ 71,033.20

6. PART VI. PHOTOGRAPHS AND ILLUSTRATIONS

Photo 1: East elevation of the Conifer Junction Schoolhouse.



Photo 2: West elevation of the Conifer Junction Schoolhouse.



Photo 3: North elevation of the Conifer Junction Schoolhouse.



Photo 4: South elevation of the Conifer Junction Schoolhouse.



Photo 5: The Conifer Junction Schoolhouse is located approximately 400 yards up the hill from Junction Corner, and early settlement and the beginnings of the town of Conifer.



Photo 6: The Conifer Junction site, looking northwest from the barn.



Photo 7: The site has a steep slope beginning from the southern edge of an asphalt-paved parking area, just to the south of the schoolhouse.



Photo 8: From left, the schoolhouse, pump house and modular building. The barn is located behind the schoolhouse. Leading up to the buildings is the driveway, which opens up to a parking lot.



Photo 9: The play yard is located between the parking area and the front of the schoolhouse. The yard is filled with mulch, and surrounded by fencing.



Photo 10: An interlocking masonry retaining wall stretches along the north, east and west sides of the play yard. The wall was built in 2006 to provide a flat area for play equipment. A chain link fence is visible beyond the retaining wall, at the north edge of the property line.



Photo 11: Rubber perimeter boundary for a sand box in the play yard.



Photo 12: South elevation of the barn. Note the privy attached to the west side of the barn.



Photo 13: North elevation of the barn. Note privy attached to west side of barn.



Photo 14: West elevation of the barn. Note privy at south edge of barn.



Photo 15: East elevation of the barn.



Photo 16: North and east elevations of the pump house. Note the location of the building in relation to the schoolhouse (left of photo), and barn (right of photo). An entry hatch is located on the east slope of the roof, and mimics the look of a chimney. Note the sagging gutter.



Photo 17: South elevation of the pump house.



Photo 18: West elevation of the pump house.



Photo 19: Significant efflorescence and water damage along the foundation on the north elevation of the barn.



Photo 20: A foundation crack with displacement in the middle of the barn door.



Photo 21: Small cracks and missing material in the foundation at the northwest corner of the barn.



Photo 22: A large hole is present in the northeast corner of the barn where the foundation steps down.



Photo 23: A large crack in the barn foundation on the south elevation approximately 3 inches from the southeast corner of the building.



Photo 24: Bolts along the sill plate on the north elevation of the barn.



Photo 25: A view of the roof framing in the barn.



Photo 26: Trim boards along the northeast corner on the barn.



Photo 27: Barn siding shows damage and poor preparation for the last paint job.



Photo 28: Siding around windows in the barn has been cut to accommodate the window installation, which were not part of the original construction.



Photo 29: Broken downspout on the pump house.



Photo 30: A sagging gutter on the pump house due to a broken gutter bracket.



Photo 31: Designated parking spots to the northeast of the schoolhouse.



Photo 32: The one handicapped parking spot at the east end of the modular building.



Photo 33: The southwest portion of the parking area is located at the bottom of a slope. This drive provides fire and service access to the basement of the building. Note that the south side of the parking area has eroded due to excessive drainage.



Photo 34: Spalling of concrete and loss of paint along the west wall due to scouring of water flowing along the adjacent slope.



Photo 35: Cracking extending from the corner of the boarded up window along the west elevation. This view is from inside the basement room between the boys and girls bathrooms.



Photo 36: Vertical crack in the basement along the east wall.



Photo 37: The joists are supported by the foundation walls on the north and south and by a wood beam consisting of four 2 inch by 10 inch members that runs north south and is visible in the crawlspace.



Photo 38: A similar column to that in the crawlspace supports the beam in the basement.



Photo 39: The roof framing in the north cloakroom.



Photo 40: An exterior window shows weathered paint.



Photo 41: Damage along the south elevation is evident where utilities have been connected, moved and removed.

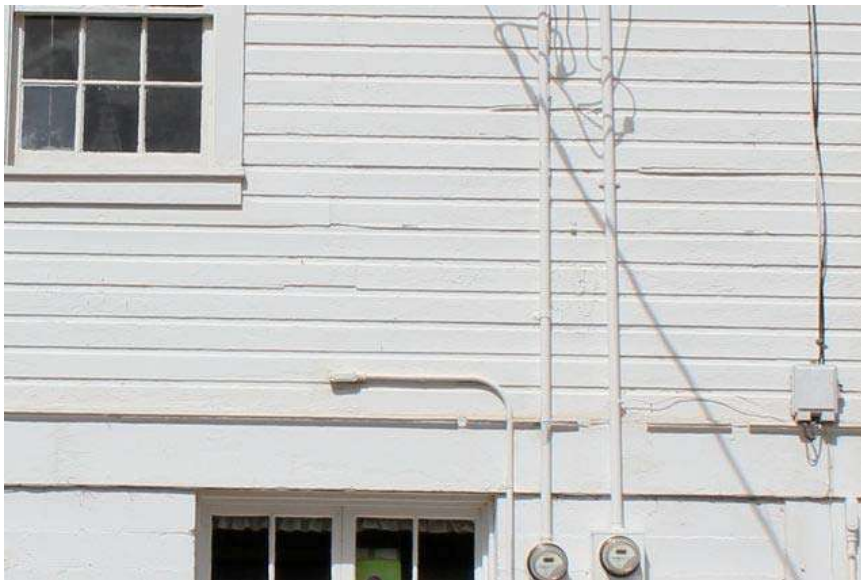


Photo 42: At the north elevation, paint failure is significant near the gutter attachment at the underside of the eaves.



Photo 43: The gutter has been cut back to allow for the 6 inch diameter vent to extend up along the chimney through the eaves. Note the significant damage to the rafter tail and eaves.



Photo 44: Water drains through a gap between the gutter end and the chimney, deteriorating the vent, the stone and mortar and the wood of the eaves and adjacent rafter tail. Rust stains on the vent pipe indicate where the water runs and the direction it continues to the ground. A vertical crack has developed roughly centered along the projecting north face of the chimney.



Photo 45: The trim piece between the siding and the water table board has been cut and damaged when utilities have been installed or moved. Notice the peeling paint where poor preparation occurred prior to the last paint job. Also notice the water table boards separating at the corner.



Photo 46: Detailed view of the chimney on the west elevation of the schoolhouse. A 6 inch diameter metal vent runs alongside the chimney. Originally, the chimney was most likely used to vent a potbellied stove in the basement.



Photo 47: A small concrete stoop located outside the north door. Note the moss growing along the stoop, most likely caused by the slope directing water toward the foundation area.



Photo 48: The deck of the porch is covered with 3 ¼ inch tongue and groove flooring that has been painted a dark green. The decking is heaving and uneven in areas where it is exposed to weather.



Photo 49: The steps leading to the porch are centered on the building. Wooden railings on either side of the stairs are similar in construction to the porch rails.



Photo 50: Putty is cracked or missing on the exterior of many windows, and the paint is weathered.



Photo 51: Divot in pane of a window on the east elevation.



Photo 52: Broken pane on a window along the north elevation.



Photo 53: A window facing south appears to have been enclosed in the stairwell.



Photo 54: Window along the west elevation has a broken sash cord and a damaged stop.



Photo 55: Exterior view of boarded up window on west elevation on basement level.



Photo 56: Interior view of the boarded up window on the west elevation at the basement level.



Photo 57: Cracked stile on the basement level casement window on the south elevation.



Photo 58: The main entry door appears to have originally contained a window at its top, but the opening has now been filled with plywood. Patches and holes in the door suggest that it once had other hardware, and may have been reversed. The paint is weathered and chipped.



Photo 59: Interior of the side door along the north elevation of the schoolhouse. The trim around the door suggests that it is a newer addition.



Photo 60: The exterior door leading from the porch to the north cloakroom. This door is nearly identical to the one leading to the south cloakroom. The fourth panel from the top of the door has been fitted with a book drop. The door is weathered, and has cracked panels and nicks and dings.



Photo 61: The basement door from the outside of the schoolhouse. The door is on the south elevation of the building.



Photo 62: Exterior of the side door along the north elevation. Note the crack in the hinge stile.



Photo 63: The stile of the exterior south cloakroom door has been damaged, exposing the lock mechanism.



Photo 64: Painted wainscoting and chair rail in the classroom.



Photo 65: Original stained and varnished wainscoting in the north cloakroom. Note the damage to the wainscot.



Photo 66: Scored hardboard in the basement painted to look like tile. At the rear of the photo is the door to the mechanical room.



Photo 67: West wall of the main classroom. Note the missing chair rail between the two windows.



Photo 68: Simple molding between the ceiling and the walls in the main classroom. Note the ghosting along the ceiling and wall from the partition wall that was removed.



Photo 69: Decorative crown molding in the north cloakroom. This appears to be original.



Photo 70: South cloakroom door. This door is similar to that leading to the north cloakroom.



Photo 71: The girls bathroom door. The door on the boys bathroom is identical with the exception of the artwork on the door.



Photo 72: The door to the storage room in the basement is unlike any other door in the schoolhouse. Due to the unique door and hardware, it is possible that this door was moved to the schoolhouse from another building.



7. PART VII. BIBLIOGRAPHY

Bentley, Margaret V. *The Upper Side of the Pie Crust: An Early History of Southwestern Jefferson County*. Evergreen, CO: Jefferson County Historical Society, 1990, 3rd ed.

Challman, Samuel Andrew. *The Rural School Plant for Rural Teachers and School Boards, Normal Schools, Teachers' Training Classes, Rural Extension Bureaus*. Milwaukee, WI: The Bruce Publishing Company, 1917.

Chesney, Ginny. "Old Schools, a lost town and a whiskey still." *High Timber Times*. 22 September 1977, pg 13-14.

Colorado State Business Directory. Spanning 1875-1956. Various publishers out of Denver, CO.

Colorado Transcript, Golden, CO.

"School Census Completed." 15 July 1920, pg 1.

8 June 1922, pg 7.

20 July 1922, pg 3.

22 February 1923, pg 6.

1 March 1923, pg 7.

8 March 1923, pg 6-7.

19 April 1923, pg 7.

2 October 1924, pg 7.

20 November 1924, pg 7.

11 December 1924, pg 7.

Currier, Lois. "Information on the Acreage and Improvement at Conifer." Computer printout, Jefferson County Historical Society, 1991.

Doggett, Suzanne and Holly Wilson. *Rural Schools in Colorado, Multiple Property Documentation Form, National Register nomination*. 1996 with revision in 1999.

Ehrgott, Alexis. "The Yellow Barn at Bradford Junction: Preserving a Jefferson County Landmark." Master of Arts Final Project: Savannah College of Art and Design, Summer 2010.

- “Golden Judge Rejects Protest of Conifer Consolidated School.” News. 30 June 1953. Conifer newspaper clippings file Denver Public Library.
- Granzella, Phebe. “A Century of Jefferson County Mountain Area Schools.” Jefferson County Historical Commission, 1993.
- Gulliford, Andrew. *America’s Country Schools*. Washington, D.C.: The Preservation Press. 1991.
- Hess, Gerda Wilhelm. “Memories of the Little White School House” Feb. 2013. Conifer Historical Society and Museum, Conifer, Colorado.
- Jefferson County Historical Commission. “Jefferson County Place Names Directory.” <http://jeffco.us/placenames/>.
- Kennedy, Joseph. *Rural Life and the Rural School*.
- Kennedy, Lois Cunniff Linstrom. *A Tribute to Education in Jefferson County, Colorado: 50 Years as One*. Golden, CO: Jefferson County Public Schools, 2001.
- Kidder, Frank E. *Kidder-Parker Architects’ and Builders’ Handbook*. New York: John Wiley & Sons, Inc., 1931.
- Lomond, Carole. *Jefferson County, Colorado A Unique and Eventful History*. Golden, CO: Views Publishing Co., 2009.
- Manuscript: *The Manuscripts of Hazel Olive Bennet Kettle*. Edited by Opal Longino. 2009. Western History and Genealogy, Denver Public Library.
- Members of the Jefferson County Historical Commission. *From Scratch: A History of Jefferson County, Colorado*. Jefferson County Historical Commission, 1985.
- Moynihan, Betty and Helen E. Waters, eds. *Mountain Memories: from Coffee Pot Hill to Medlen Town*. Lakewood, CO: Limited Publications. 1981.
- Newman, Karen and Jeanne Varnell. “A School District is Born.” Supplement to Sentinel Newspapers. 3 March 1977.
- Norman, Cathleen M. *Preliminary Historic Contexts: 1999-2000 Cultural Resource Survey of Unincorporated Jefferson County*. Jefferson County Historical Commission: 2000.
- Sargent, Christopher Gilbert. *Rural School Improvement in Colorado*. Fort Collins, CO: Colorado Agricultural College, 1918.
- Shown, Janet. “Party! Little White Schoolhouse Turns 90.” Mountain Connection. 2 February 2013. <http://mtnconnection.com/2013/02/02/party-little-white-schoolhouse-turns-90>.

Shurick, Edward Palmes. A Plea for Better Schools. Duluth, MN: Shurick and Hansen Company, 1916.

Water, Helen E. "No Regrets." Canyon Courier. 198?, pg 4B.

Wickham, Irene Wilhelm. "Fond Memories of the Conifer Little White Schoolhouse." 19 February 2013. Conifer Historical Society and Museum, Conifer, Colorado.

8. PART VIII. APPENDIX

Figure 1: Label on early sheetrock found in the attic of the school. The label states that the manufacturer of the material is the United States Gypsum Company, and that the company has a sales office in Denver.

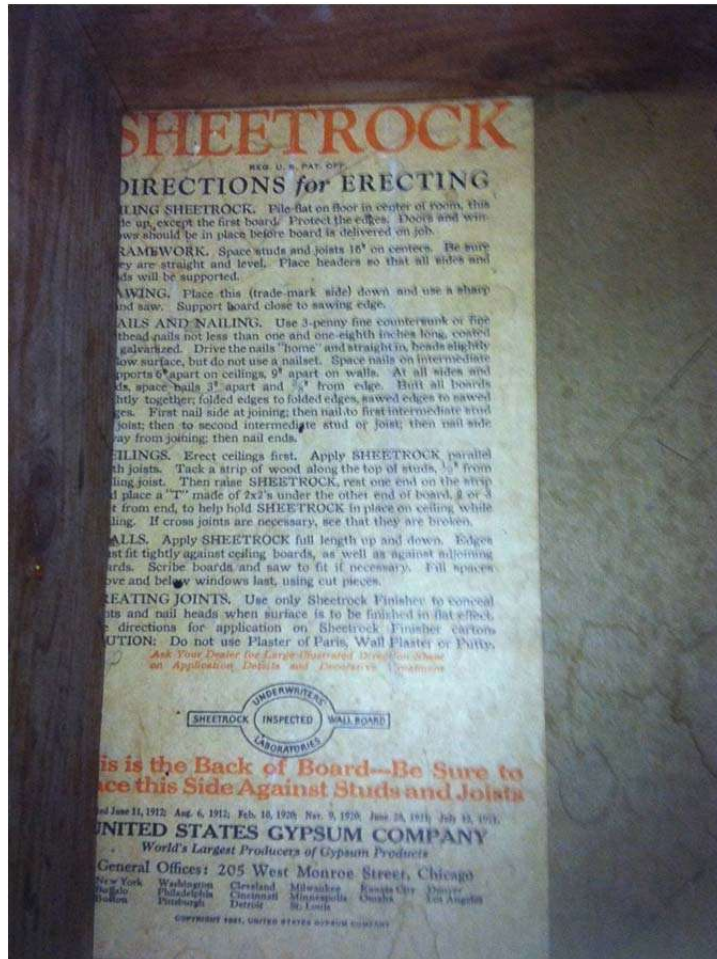


Figure 2: 1922 advertisement for sheetrock from United States Gypsum Company.

OCTOBER 1922 295

Sheetrock actually is $\frac{3}{4}$ inch thick, 32 and 48 inches wide, 6 to 10 feet long



See the simplicity of permanent Sheetrock construction

Sheetrock makes attractive, non-warping walls and ceilings

A Few Dollars . . . A New Room

See what can be done with any waste space and a few sheets of Sheetrock, the fireproof wallboard. In a few hours, and at slight cost, you can have a playroom for the children, a maid's room, a den for the head of the house, or an extra room for yourself.

Just tell the carpenter what you want. All he has to do is nail the broad, ceiling-high sheets of Sheetrock to the joists or studding, apply Sheetrock Finisher, and the room is ready for decoration and use.

And the result is attractive, valuable, permanent. Walls and ceilings made of Sheetrock are standard plaster

walls and ceilings; for Sheetrock is gypsum plaster cast in sheets. They are tight-jointed, solid and sound-proof. They will not warp, shrink or buckle. They take any decoration, paper, paint or panels.

Your dealer in lumber or builders' supplies sells Sheetrock. Our illustrated booklet, "Walls of Worth," pictures its many economical uses in new construction, alterations and repairs. Write for a free sample and a copy.



SHEETROCK
Reg. U. S. Pat. Off.
The FIREPROOF WALLBOARD

UNITED STATES GYPSUM COMPANY, General Offices: 209 West Monroe Street, Chicago
World's Largest Producers of Gypsum Products

Approved by The Underwriters' Laboratories, Inc.

Figure 3: Item from the June 8, 1922 edition of the *Colorado Transcript*, a local newspaper, showing that Conifer was in need of a new school

The taxpayers of Conifer school district held a special meeting June first, to issue bonds to build a new school house. On account of some misunderstanding they have to hold another meeting soon. This district is in dire need of a new school and it should be more centrally located.

Figure 4: Item from the July 22, 1922 edition of the *Colorado Transcript*. Local residents were in favor of building the school at its current location.

A school meeting was held here Saturday to vote on the new school house. Those in favor of having it built at the junction won and another meeting will be called shortly to decide on the bonds.

Figure 5: Item from the January 18, 1923 edition of the *Colorado Transcript*, showing that just six months later construction of the school was nearly finished.

E. J. Fleenster and J. Bruce Math-
er, of Conifer, were transacting business in Morrison Monday. They report the fine new school house of Dist. 9 nearly completed.

Figure 6: An item from the February 22, 1923 edition of the *Colorado Transcript*, showing that the school opened on February 12, 1923.

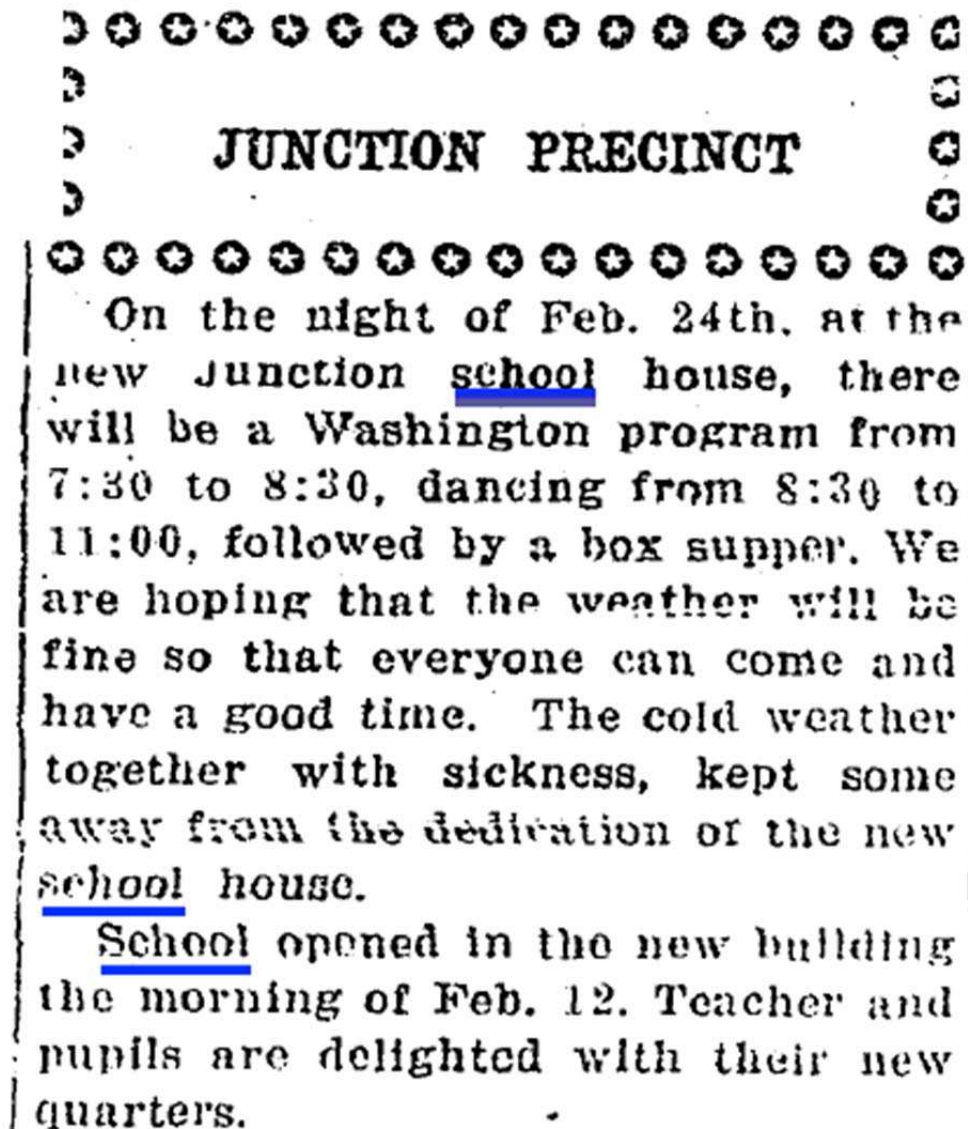


Figure 7: Item from the March 8, 1923 issue of the *Colorado Transcript*.

The new Junction school house has just been finished within by oil and varnish coats on floor, wainscoting and window and door trim; and by broader milled strips on the ceiling, which gives a fine beam effect, and better support to the ceiling board. Fifteen neat, comfortable seats—enough to seat 150 people—have been built and will be finished like the wainscoting. This seat building and repair of ceiling, as well as the painting, is the work of J. B. Mather.

Figure 8: Item from the April 12, 1923 edition of the *Colorado Transcript*.

*
* JUNCTION PRECINCT *
*

Mrs. Evangeline Cummings, county superintendent of schools, and Miss Ridley, county nurse for schools, visited Junction school, District No. 9, last Thursday, and their words of good counsel and encouragement to the large group of patrons, and the teacher who received them at the new school house, were truly inspiring, and inciting toward better things for the future of this district, which is awake, and alert for progress.

The Veterans' Drum Corps, members of Farrigut Relief corps, and Daughters of Veterans, of Denver, promise to be present and to participate in the program when their gifts of flags are presented at 2:30 p. m., on Sunday, April 29th, at the new school house.

Figure 9: Item from the April 26, 1923 edition of the *Colorado Transcript*.

Community Day was observed on Saturday, the 21st, at the Junction school grounds. People representing a pretty broad scope of country gathered early in the day and engaged in clearing the grounds, trimming the large trees, and cutting out scrubby and crooked ones, preparing a fifty-foot flag pole, and in burning the trash and brush. Community lunch was served in the basement of the new school house at noon, and at 3:30 p. m., the school and the workers gathered in the large school room for enjoyment of a most excellent literary and musical program presented by the school, trained and directed by the teacher, Mrs. Kuntz. Work on the grounds was resumed, and continued until dark. Some remained for another lunch in the basement, and others went home to do chores, but returned to join a larger assembly in the later evening. Another program was given, and some nice, orderly dancing went on until just before midnight when the meeting adjourned amid expressions of enjoyment on the part of many. Never in the history of this school district has there been such an interest in school matters, and neighborhood welfare. Agitation in-