

**PATRICK W. STUCKEY ARCHITECTS**

960 Clubhouse Drive, New Castle, CO 81647

Office 970/984-9220

Fax 970/984-9221

April 18, 2011

Historic Preservation Commission  
450 West Main Street  
New Castle, Colorado 81647

Re: Initial Overview of Historic Museum located at 116 North  
4<sup>th</sup> Street, New Castle, Colorado

Dear Commissioners,

I invited Mike Thele, Structural Engineer, to accompany me in a walk through of the Historic Museum. This occurred on April 12, 2011. Our intended purpose was to generally evaluate the condition of the building for future evaluation and remediation of any deficiency the building may have. This was only a cursory review based on our visual observations and was not intended to be of any official or professional review.

The Historic Museum is a single story structure with approximately 1400 square feet constructed around the year 1900. It has a gable wood frame, standing seam metal roof and stucco covered unfired clay brick bearing walls. A ten-foot deep concrete block addition was added in more recent years. This has a shed roof of asphalt shingles. The historic carved stone walled, wood frame shed roof jail stands beyond the addition with a grass court area between.

It is apparent that the museum's roof has stood the test of time and remains in good shape. See Structural Engineer's comments. The interior and exterior walls have various cracks and are most likely due to minor foundation settlement. There are a couple of interior locations where the cracking has exposed the unfired clay brick. These exposed areas have shown the erosion of the brick, which is most likely due to infiltration of moisture into these areas. There are apparent gaps around the roof penetrations in at least one area and roof flashing and drainage assembly deterioration in others with potential allowance of moisture into the interior wall cavity. The existing north exterior concrete block wainscot wall is not flashed properly. This is possibly creating additional moisture infiltration into the wall cavity at this point along the top of the wainscot wall.

The concrete block addition has a significant crack on the east wall running its full height. Plus there is wall separation between the original building and the addition. See Structural Engineer's comments. The asphalt shingle roof has deteriorated to the point of potential failure. The historic jail is unprotected from nature's elements and will continue to deteriorate over time. Even with the existing shed roof assembly there is no moisture protection or prevention of the weather infiltrating the buildings structure system.

Water was observed on the floor in northwest corner of the addition and may be caused by poor site drainage. Both this structure and the neighboring lot are draining

into the same area. There is little slope to the gravel ditch and it is blocked at the east end at the alley.

The Historic Museum is in relative good condition, but needs attention to maintain its integrity for the future. Repair of the interior cracks, deteriorating brick remediation and attention to sealing and moisture proofing the exterior stucco cracks would be advisable. Quality flashing details at the north concrete block wall wainscot and other exterior ledges would be beneficial in eliminating moisture infiltration in these areas. Plus, detailing and installation of the roof flashing at penetrations, soffits and roof/wall intersections along with regrading and repair of the north site area would be advisable. The shed roof of the addition needs replacement, while repair of the cracks in the concrete block walls would be beneficial to its integrity. The jail structure will require an in depth overhaul of the roof structure and moisture control.

There is more extensive work that could possibly be done to bring them into code and extend the life of all the buildings if it would be desirable.

Thank you for the opportunity to review the museum. We look forward to assisting you in developing plans to repair and upgrade the museum facilities to maintain its quality and value to the community.

If you should have any questions regarding these issues, please do not hesitate to call.

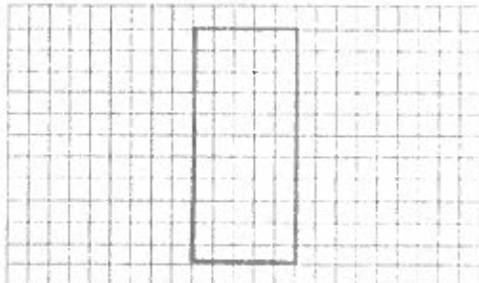
Sincerely,

Patrick W. Stuckey  
Architect, NCARB, AIA

**APPENDIX**

**Survey Forms**



<b>PLAN SHAPE:</b> 	<b>ARCHITECT:</b> Unknown	<b>STATE ID NO.:</b> 5GF1665
	<b>SOURCE:</b>	<b>ORIGINAL OWNER:</b> Town of New Castle
	<b>BUILDER/CONTRACTOR:</b> Robert Kennedy	<b>SOURCE:</b> Town Council Minutes, 1893-94
	<b>SOURCE:</b> Town Council Minutes, 1893-94	<b>THEME(S):</b> Rail Towns, 1870-1920

**CONSTRUCTION HISTORY (DESCRIPTION, NAMES, DATES, ETC., RELATING TO MAJOR ALTERATIONS TO ORIGINAL STRUCTURE):**  
 Roof shape of main part of building was originally flat; gable added later. The cinderblock rear addition was added as a furnace room in the 1960s. Stucco was added to the exterior to preserve the locally made brick.

CONTINUED YES X NO

**HISTORICAL BACKGROUND (DISCUSS IMPORTANT PERSONS AND EVENTS ASSOCIATED WITH THIS STRUCTURE):**  
 This building was erected as the town hall and hose house for New Castle in 1893-94. Previously, the town government had operated from various local hotels. The building contained offices for the town clerk and the chambers of the town council, as well as storage space for the fire department equipment. The 1899 Sanborn map indicates that the building housed two independent hose carts, had a belfry 6' above the roof, and a catabouse in the rear. These features are also shown on the 1904 map, and 350' of 2 1/2" hose is also noted. The building now houses an historical museum including displays, historical artifacts, and photographs and archival materials, operated by the New Castle Historical Society.

CONTINUED YES X NO

**SIGNIFICANCE (CHECK APPROPRIATE CATEGORIES AND BRIEFLY JUSTIFY BELOW):**

**ARCHITECTURAL SIGNIFICANCE:**

REPRESENTS THE WORK OF A MASTER  
 POSSESSES HIGH ARTISTIC VALUES  
 REPRESENTS A TYPE, PERIOD, OR METHOD OF CONSTRUCTION

**HISTORICAL SIGNIFICANCE:**

ASSOCIATED WITH SIGNIFICANT PERSONS  
 ASSOCIATED WITH SIGNIFICANT EVENTS OR PATTERNS  
 CONTRIBUTES TO AN HISTORIC DISTRICT

**STATEMENT OF SIGNIFICANCE:**

This building, erected as the New Castle Town Hall and Hose House in 1893, is significant for its association with the history of local government in New Castle.

CONTINUED YES X NO

**REFERENCES (BE SPECIFIC):**

Garfield County Assessor, Commercial Property Appraisal Record; Sanborn Insurance maps, 1893-1904; Historic Building Inventory Record, New Castle Town Hall, 8 December 1992; New Castle Historical Society, "City of Black Gold: A Walking Tour of the Town," 1988.

CONTINUED YES X NO

**SURVEYED BY:** R.L. Simmons/T.H. Simmons

**AFFILIATION:** Front Range Research Associates, Inc.

**DATE:** June 1996

**MIKE THELE, P.E.**

**Structural Engineering Services, Inc.**

0296 Seven Oaks Road : Carbondale, Colorado 81623

(970) 963-3181 : Toll Free (888) 845-3911 : Fax (970) 963-3182

thelepe@wildblue.net

April 14, 2011

Patrick Stuckey  
Patrick W. Stuckey Architects  
960 Clubhouse Drive  
New Castle, Colorado 81647

Re: New Castle Historical Museum  
116 North 4<sup>th</sup> Street, New Castle, CO

Dear Patrick:

At your request I visited the New Castle Historical Museum site with you at the above noted address on Tuesday, April 12, 2011 to observe and review the building structure. The following is a brief summary of our findings.

The Historical Museum is a single story structure approximately 25'-5" wide x 55'-2" long with a wood framed gable roof over brick bearing walls and a concrete slab floor originally built around 1900. There is a contemporary 10'-0" long addition on the east end of the original building with a wood framed shed roof over concrete block bearing walls. And just east of the main building is the historical jail with a wood framed shed roof over stone bearing walls. The gable roof over the museum is framed with 2x6 rafters at 24" on center and 2x8 ceiling joists at 16" on center with 2x6 vertical struts below the ridge at about 48" on center.

The 2x6 rafters at the museum gable roof are found to have a snow load capacity of approximately 20 lbs./sq. ft. In the absence of a ridge beam the 2x8 ceiling joists appear to function as collar joists or ties for the rafters although the framing attachments at the bearing walls were not observable to confirm this. The current building code requires a design snow load of 40 lbs./sq. ft. The roof framing appeared to be in good condition with no serious sign of damage or deterioration except for water stains.

The exterior walls are brick with a stucco coating. It is my understanding that the bricks are un-fired clay but they are only visible in limited locations where the stucco coating is cracked. There are some locations where deterioration is visible due to water penetration through damaged and cracked stucco. And there are several wall cracks around the building that are probably due to minor foundation settlement but they do not appear to be serious as they are closed and sealed with stucco. Generally the walls appear to be in relatively sound condition as indicated by lack of serious cracking or settlement. One exception is the east concrete block wall at the addition where a full width crack runs the full height of the wall. This seems to indicate that the wall may not be reinforced. There are

Site Visit & Structural Observations  
New Castle Historical Museum  
April 14, 2011  
Page two

also separation cracks where the concrete block walls meet the original brick walls indicating a lack of positive connection.

A 6" concrete block sill wall was observed running along the base of the north exterior wall. The top of the sill wall creates a ledge and is not adequately sealed or flashed against water penetration. One of the more severe areas of deterioration visible inside the building coincides with the exterior sill indicating a location where water is leaking into the wall.

It was also observed that the gutter along the north eave drains near the building wall at the north east corner and the downspout for the neighboring building to the north also drains to this area. There does not appear to be adequate site drainage to move the water away from this area so it is probably the source of the reported occasional leak in the museum addition. Over a long period of time it would also contribute to soil and foundation settlement and could be the cause of the crack in the addition wall.

The Historical Museum could not be considered to meet current structural building code standards but has stood the test of time and is in relatively sound condition. The greatest concern for the continued integrity of the structure would be maintenance of the exterior brick walls. The cracked and damaged stucco should be replaced or repaired to provide a water tight seal for the brick walls. A properly detailed flashing assembly should be installed at the exterior ledges. And site drainage should be addressed along the north side of the building.

Other structural issues that should be considered for long range planning would include roof framing upgrades to meet current snow loading requirements, foundation investigation and stabilization and exterior wall investigation and rehabilitation. The historic jail would require roof structure and roofing repair as well as stone wall repairs.

Please feel free to contact my office if I may be of further service or if you have questions or other concerns.

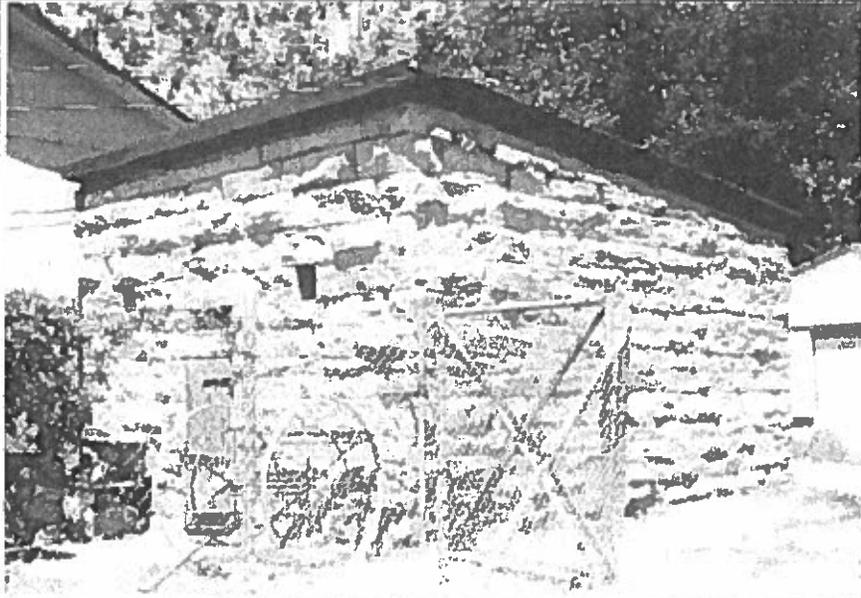
Limitations: The above comments and discussion are based solely on visual observations of exposed and accessible building components. No finish materials were removed to observe concealed structural elements. No measurements, calculations or analyses were performed to determine the adequacy of structural elements except as noted above. No conclusions are drawn regarding compliance of the building with applicable building codes.

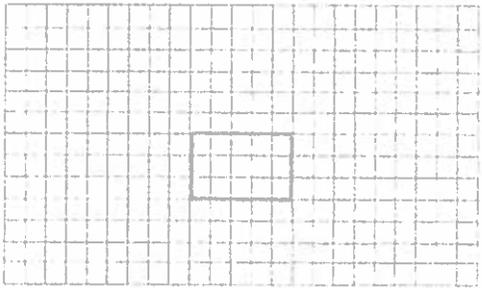
Sincerely:

Michael J. Thele, P.E.  
Structural Engineering Services, Inc.

HISTORIC BUILDING INVENTORY RECORD

NOT FOR FIELD USE	
<input type="checkbox"/> Eligible	<input type="checkbox"/> Nominated
<input type="checkbox"/> Det. Not Eligible	<input type="checkbox"/> Certified Rehab.
Date _____	

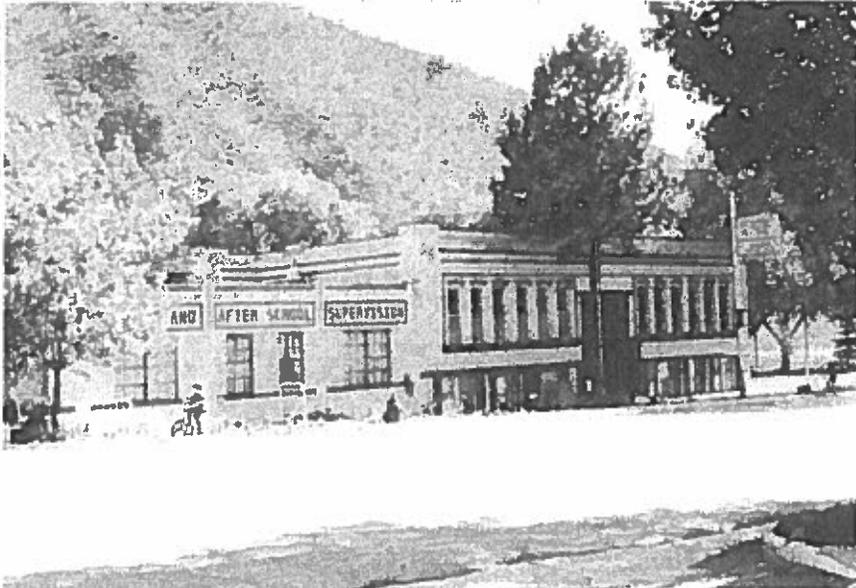
PROJECT NAME: New Castle, Colo. Historic Buildings Survey, 1996 (#95-M3-31)		COUNTY: Garfield	CITY: New Castle	STATE ID NO.: 5GF2367
CURRENT BUILDING NAME: New Castle Museum		OWNER: Town of New Castle P.O. Box 166 New Castle, CO 81647		
ADDRESS: 116 N. 4TH St. (rear) NEW CASTLE, CO 81647		TOWNSHIP 5S	RANGE 90W	SECTION 31 SW 1/4 NE 1/4
HISTORIC NAME: New Castle Town Jail		U.S.G.S. QUAD NAME: New Castle, Colo. YEAR: 1962 (PR1987) X 7.5' 15'		
DISTRICT NAME:		BLOCK: B	LOT(S): 30	
FILM ROLL NO.: 96-1 BY: T.H. Simmons		NEGATIVE NO.: 4A		LOCATION OF NEGATIVES: Town of New Castle
		DATE OF CONSTRUCTION: ESTIMATE: 1895 ACTUAL: SOURCE: Sanborn Maps, 1893-99		
		USE: PRESENT: Museum Exhibit  HISTORIC: Jail		
		CONDITION: EXCELLENT X GOOD FAIR DETERIORATING		
		EXTENT OF ALTERATIONS: X MINOR MODERATE MAJOR DESCRIBE: Roof replaced.		
		CONTINUED YES X NO		
STYLE: Vernacular Masonry		STORIES: 1	ORIGINAL SITE X MOVED DATE(S) OF MOVE:	
MATERIALS: Stone		SQ. FOOTAGE:	NATIONAL REGISTER ELIGIBILITY	
ARCHITECTURAL DESCRIPTION: One-story jail building composed of roughly quarried coursed stone; stone foundation. Walls about 2' thick. Shed roof with concrete below roofline; rolled roofing and overhanging eaves. Center door composed of vertical boards with iron hinges and metal lock bar. Three small vent openings on facade. Interior divided into two cells to recreate original appearance.		INDIVIDUAL: X YES NO		
		CONTRIBUTING TO DISTRICT: YES NO		
		LULAL LANDMARK DESIGNATION. NO NAME: DATE:		
		ASSOCIATED BUILDINGS? X YES NO TYPE: Town Hall		
ADDITIONAL PAGES: YES X NO		IF INVENTORIED, LIST ID NOS.: SGF		

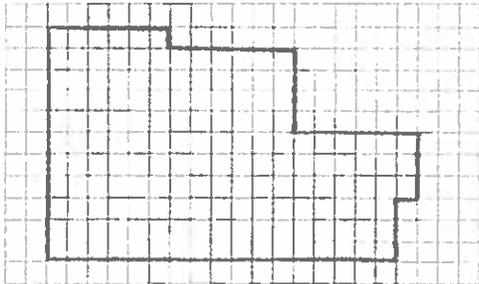
<b>PLAN SHAPE:</b> 	<b>ARCHITECT:</b> Unknown	<b>STATE ID NO.:</b> 5GF2367		
	<b>SOURCE:</b>	<b>ORIGINAL OWNER:</b> Town of New Castle		
	<b>BUILDER/CONTRACTOR:</b> Unknown	<b>SOURCE:</b> New Castle Historical Society		
	<b>SOURCE:</b>	<b>THEME(S):</b> Rail Towns, 1870-1920		
<b>CONSTRUCTION HISTORY (DESCRIPTION, NAMES, DATES, ETC., RELATING TO MAJOR ALTERATIONS TO ORIGINAL STRUCTURE):</b>  <p style="text-align: right;">CONTINUED    YES    X    NO</p>				
<b>HISTORICAL BACKGROUND (DISCUSS IMPORTANT PERSONS AND EVENTS ASSOCIATED WITH THIS STRUCTURE):</b> This building was erected as the New Castle jail. The Sanborn map of 1893 shows the lot as vacant, while the 1899 map indicates that this was the "calaboose." The 1904 map indicates the same use.				
<p style="text-align: right;">CONTINUED    YES    X    NO</p>				
<b>SIGNIFICANCE (CHECK APPROPRIATE CATEGORIES AND BRIEFLY JUSTIFY BELOW):</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>ARCHITECTURAL SIGNIFICANCE:</b>            REPRESENTS THE WORK OF A MASTER            POSSESSES HIGH ARTISTIC VALUES  <input checked="" type="checkbox"/> REPRESENTS A TYPE, PERIOD, OR METHOD OF CONSTRUCTION         </td> <td style="width: 50%; vertical-align: top;"> <b>HISTORICAL SIGNIFICANCE:</b>            ASSOCIATED WITH SIGNIFICANT PERSONS  <input checked="" type="checkbox"/> ASSOCIATED WITH SIGNIFICANT EVENTS OR PATTERNS            CONTRIBUTES TO AN HISTORIC DISTRICT         </td> </tr> </table>			<b>ARCHITECTURAL SIGNIFICANCE:</b> REPRESENTS THE WORK OF A MASTER POSSESSES HIGH ARTISTIC VALUES <input checked="" type="checkbox"/> REPRESENTS A TYPE, PERIOD, OR METHOD OF CONSTRUCTION	<b>HISTORICAL SIGNIFICANCE:</b> ASSOCIATED WITH SIGNIFICANT PERSONS <input checked="" type="checkbox"/> ASSOCIATED WITH SIGNIFICANT EVENTS OR PATTERNS CONTRIBUTES TO AN HISTORIC DISTRICT
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<b>STATEMENT OF SIGNIFICANCE:</b> The New Castle jail is significant for its association with the early development of the legal system in the town and for its representation of the construction of vernacular stone jails in Colorado during the late nineteenth century, as reflected in the building's composition of locally quarried stone and its austere design.				
<p style="text-align: right;">CONTINUED    YES    X    NO</p>				
<b>REFERENCES (BE SPECIFIC):</b> Garfield County Assessor, Commercial Property Appraisal Record; Sanborn Insurance maps, 1893-1904.				
<p style="text-align: right;">CONTINUED    YES    X    NO</p>				
<b>SURVEYED BY:</b> R.L. Simmons/T.H. Simmons	<b>AFFILIATION:</b> Front Range Research Associates, Inc.	<b>DATE:</b> June 1996		

COLOMADO HISTORICAL SOCIETY  
 Office of Archaeology and Historic Preservation  
 1300 Broadway, Denver, Colorado 80203

HISTORIC BUILDING INVENTORY RECORD

NOT FOR FIELD USE	
<input type="checkbox"/> Eligible	<input type="checkbox"/> Nominated
<input type="checkbox"/> Det. Not Eligible	<input type="checkbox"/> Certified Rehab.
Date _____	

PROJECT NAME: New Castle, Colo. Historic Buildings Survey, 1996 (#95-M3-31)		COUNTY: Garfield	CITY: New Castle	STATE ID NO.: 5GF2369
CURRENT BUILDING NAME: Rosie's Roller Skating/Ferrin's Daycare		OWNER: Cleyo H. and Rosie B. Ferrin P.O. Box 59 New Castle, CO 81647		
ADDRESS: 151 W. MAIN ST. NEW CASTLE, CO 81647		TOWNSHIP 5S	RANGE 90W	SECTION 31 NW 1/4 SE 1/4
HISTORIC NAME: New Castle School		U.S.G.S. QUAD NAME: New Castle, Colo. YEAR: 1962 (PR1987) X 7.5' 15'		
DISTRICT NAME:		BLOCK: 2	LOT(S): 1-11, 23, 24	
		ADDITION: Original Townsite YR. OF ADDITION: 1888		
FILM ROLL NO.: 96-2 BY: T.H. Simmons	NEGATIVE NO.: 12A	LOCATION OF NEGATIVES: Town of New Castle		DATE OF CONSTRUCTION: ESTIMATE: ACTUAL: 1912-13 SOURCE: Garfield County Assessor
				USE: PRESENT: Childcare Center HISTORIC: School
				CONDITION: EXCELLENT X GOOD FAIR DETERIORATING
				EXTENT OF ALTERATIONS: MINOR X MODERATE MAJOR DESCRIBE: Painted brick and stone; addition on east (1937); stairs and deck on west; some basement windows boarded up. Originally had pediment on facade, removed many years ago. Entrance added to facade by 1920.
				CONTINUED YES X NO
STYLE: Vernacular Masonry	STORIES: 1	ORIGINAL SITE X MOVED DATE(S) OF MOVE:		
MATERIALS: Brick, Stone, Adobe (addition)	SQ. FOOTAGE: 18,565	NATIONAL REGISTER ELIGIBILITY INDIVIDUAL: YES X NO CONTRIBUTING TO DISTRICT: YES NO		
ARCHITECTURAL DESCRIPTION: One-story brick school building with raised basement level; one-story addition on east. Flat roof with cornice of decorative brickwork. Piers at each corner of building project above roofline. Walls composed of painted brick with decorative panels on side walls; painted stone foundation and basement level. Central, recessed entrance with two sets of double doors topped by large four-light transoms. Double door on west with arched, divided transom and decorative brick lintel. Series of six tall, narrow, double-hung windows with segmental arched lintels and shared sill course flank entrance. Double-hung windows, paired and single, in basement level. Addition on east is composed of adobe brick, one-story, flat roofed, with large multi-light windows and stepped cornice with with Art Deco speed lines.				LULAL LANDMARK DESIGNATION. NO NAME: DATE:
				ASSOCIATED BUILDINGS? YES X NO TYPE:
				IF INVENTORIED, LIST ID NOS.:
ADDITIONAL PAGES: YES X NO				

<b>PLAN SHAPE:</b> 	<b>ARCHITECT:</b> Unknown	<b>STATE ID NO.:</b> 5GF2369
	<b>SOURCE:</b>	<b>ORIGINAL OWNER:</b> New Castle School District
	<b>BUILDER/CONTRACTOR:</b> Unknown	<b>SOURCE:</b> Garfield County Library Files
<b>SOURCE:</b>	<b>THEME(S):</b> Rail Towne, 1870-1920	

**CONSTRUCTION HISTORY (DESCRIPTION, NAMES, DATES, ETC., RELATING TO MAJOR ALTERATIONS TO ORIGINAL STRUCTURE):**

CONTINUED YES X NO

**HISTORICAL BACKGROUND (DISCUSS IMPORTANT PERSONS AND EVENTS ASSOCIATED WITH THIS STRUCTURE):**

After New Castle's 1892 school building became unusable due to structural problems in 1909, classes were held in various buildings around town, including the town hall and various churches. The town did not erect a new building until 1912-13, when New Castle received \$7,500 in emergency school funds from the state. The bricks used in the construction of the building reportedly came from the Ganley Ranch and the stone was from a local quarry. The building did not have indoor plumbing when first completed. The building was dedicated in December 1913. The first graduation from the school was in 1924; graduates were Edward Jordon and Edward Tarro. There was little space for athletic activities and space was leased in other buildings for recreation after school and for night basketball games. The gymnasium/auditorium and classroom addition was completed with WPA labor in 1939 at a cost to the district of \$700. The adobe bricks for the gym were produced on the school grounds. After the addition was completed, there were six teachers: three for elementary school children and three high school teachers, including the principal. Later, the school affiliated with the state agricultural college and instruction included an agricultural class and a workshop. The library of the school later became a county library. In 1972, New Castle Elementary and Riverside Junior High School was built west of Elk Creek. The school later housed a restaurant, the Iron Skillet.

CONTINUED YES X NO

**SIGNIFICANCE (CHECK APPROPRIATE CATEGORIES AND BRIEFLY JUSTIFY BELOW):**

**ARCHITECTURAL SIGNIFICANCE:**

- REPRESENTS THE WORK OF A MASTER  
 POSSESSES HIGH ARTISTIC VALUES  
 REPRESENTS A TYPE, PERIOD, OR METHOD OF CONSTRUCTION

**HISTORICAL SIGNIFICANCE:**

- ASSOCIATED WITH SIGNIFICANT PERSONS  
 ASSOCIATED WITH SIGNIFICANT EVENTS OR PATTERNS  
 CONTRIBUTES TO AN HISTORIC DISTRICT

**STATEMENT OF SIGNIFICANCE:**

This building is significant for its association with the history of education in New Castle, having been erected as the New Castle School in 1912-13 and continuing to house classes until 1972. The building is representative of early twentieth century school construction in Colorado's small towns and is notable for its composition of locally manufactured brick and locally quarried stone. The school auditorium is significant for its representation of Depression era construction in New Castle and its composition of adobe brick manufactured on the school grounds.

CONTINUED YES X NO

**REFERENCES (BE SPECIFIC):**

Garfield County Assessor, Commercial Property Appraisal Record; New Castle Museum; New Castle Historical Society, "City of Black Gold: A Walking Tour of the Town," 1988; Mary Wade and Gladys Prendergast, "History of New Castle, Colorado," n.d.; Steve Rippey, New Castle, Photograph Collection; Edna Sample, "Short History of New Castle Schools," 1990; Garfield County Public Library, New Castle Clipping Files.

CONTINUED YES X NO

**SURVEYED BY:** R.L. Simmons/T.H. Simmons

**AFFILIATION:** Front Range Research Associates, Inc.

**DATE:** June 1996