NPS Form 10-900 United States Department of the Interior	OMB No. 1024-0018	1144
National Park Service National Register of Historic Places Registration This form is for use in nominating or requesting determinations for individual properties and districts. See instr	UEIVEU 228	0
Bulletin, How to Complete the National Register of Historic Places Registration Form. If any item does not documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas categories and subcategories from the instructions.	apply to the property being	
1. Name of Property Historic name: <u>Minnesota and International Railway Trestle at Blackdu</u>	GISTER OF HISTORIC PLACE	ES
Other names/site number:Blue Ox Trail over Coburn Creek,	CAVAL PARA SERVICE	
Mn/DOT Bridge No. R0522		
Name of related multiple property listing:		
Railroads in Minnesota, 1862-1956		
(Enter "N/A" if property is not part of a multiple property listing		
2. Location		
Street & number: _0.25 miles north of JCT CSAH 39	-	
City or town: <u>Blackduck</u> State: <u>MN</u> County: <u>Be</u>	eltrami	
Not For Publication: N/A Vicinity: N/A		
3. State/Federal Agency Certification		
As the designated authority under the National Historic Preservation Act, a	is amended,	
I hereby certify that this <u>X</u> nomination <u>request</u> for determination of the documentation standards for registering properties in the National Registering Places and meets the procedural and professional requirements set forth in	ster of Historic	
In my opinion, the property _X meets does not meet the National I recommend that this property be considered significant at the following level(s) of significance:	Register Criteria.	
nationalstatewidelocal Applicable National Register Criteria:		
<u>ABX_CD</u>		
Bawara Journal December	13,2013	
Signature of certifying official/Title: Barbara Mitchell Howard, Deputy SHPO, M	N Date	
State or Federal agency/bureau or Tribal Government		

National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB No. 1024-0018

Minnesota and International Railway Trestle at Blackduck

Name of Property

Beltrami, MN County and State

In my opinion, the property	_ meets	does not meet the National Register criteria.

Signature of commenting official:

Date

Title :

State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

 $\underline{\mathbf{V}}$ entered in the National Register

- ____ determined eligible for the National Register
- ____ determined not eligible for the National Register
- ____ removed from the National Register

____ other (explain:)

Х

Signature of the Keeper

2.5.14

Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.) Private:

Public - Local

Public - State

Public - Federal

Category of Property

(Check only one box.)

Building(s)	
District	

Sections 1-6 page 2

Minnesota and International Railway Trestle at

Blackduck Name of Proper

me of Property
Site

Structure	X
Object	

Beltrami, MN County and State

Number of Resources within Property

(Do not include previously listed resources in the count) Contributing Noncontributing

	 buildings
	 sites
1	 structures
	 objects
	 Total

Number of contributing resources previously listed in the National Register ____0_

6. Function or Use Historic Functions (Enter categories from instructions.) TRANSPORTATION/Rail-related

Current Functions

(Enter categories from instructions.) TRANSPORTATION/Pedestrian-related

Minnesota and International Railway Trestle at Blackduck Name of Property

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7. Description

Architectural Classification (Enter categories from instructions.) Other: Railroad trestle

Materials: (enter categories from instructions.) Principal exterior materials of the property: <u>WOOD</u>

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Minnesota and International (M&I) Railway Trestle at Blackduck is situated in southwestern Beltrami County in the southeastern section of Blackduck, a small rural community located in the heart of northern Minnesota's abundant pine forest and lake region. The southwest to northeast alignment of the rail line is supported by the 701' timber trestle which spans Coburn Creek (photo #1). Built during the years 1901 - 1902 by veteran bridge builder, Frank O'Brien, the massive timber trestle is comprised of a series of longitudinal beams supported on timber piles and is a very good example of the type of timber trestles which were enormously popular with the railroads in the early part of the twentieth century. After the railroad ceased operation the trestle was acquired by Mn/DOT in 1992 and was converted for pedestrian and recreational vehicle use as part of the Blue Ox Trail, also known as the Voyageur Trail.

Minnesota and International Railway Trestle at Blackduck

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Name of Property

Narrative Description

The grade separation structure along the M&I at Blackduck is a remarkable example of a timber railroad trestle. A railroad trestle is a structure designed to span streams, gullies, drainage ditches or other unstable land. Trestle bridges have been used in the United States since the 1700's and became enormously popular with the railroad between the years 1900 and 1950.¹ The timber trestle type of span represents a simple engineering solution to grade separations and is constructed of a framework of timber piles (bents) driven into unstable sediments. Timber stringers are attached longitudinally atop the bents to support the rails and ties.

The M&I Railway Train Trestle at Blackduck is constructed of a timber superstructure and substructure accessed by gravel approaches on the northeast and southwest ends. The superstructure consists of the deck, floor system and railing. The deck portion of the superstructure forms the roadway and distributes the vehicle load. The Blackduck trestle deck is not original and was reconstructed with 12' timber beams arranged in a longitudinal orientation with a surface area of 8,412 square feet (photo # 2, 3, 4). Below the deck are the original 8" x 8" ties that are approximately 15 feet long resulting in a total of 672 linear feet (photo #24). The floor system is comprised of 282 fifteen-foot-long 10" x 18" beams fastened together to form two sets of 30" x 18" longitudinal stringers resulting in a total of 4206 linear feet and is supported by 46 pile bents. The railing system completes the superstructure. The timber railings are not original and are constructed of vertical wood posts, symmetrically placed with a horizontal wood cap resulting in a total of 1402 linear feet. The railing on the east side is reinforced with struts (photo #3, 6, 7, 23).²

The substructure transmits loads from the superstructure to the supporting soil or rock and consists of abutments that support the bridge ends and bents that provide intermediate support for the multi-span structure. Each bent is constructed of five 16" diameter timber piles with the end piles battered approximately 7°. Each bent is reinforced with 3" x 10" cross sway bracing and also with a horizontal return (photo # 15, 16, 18-22). The piles are secured by the cap which is formed by two 7 $\frac{1}{2}$ " x 14" beams fastened together and secured to each bent. The base of the trestle is reinforced with 6" x 10" longitudinal bracing fastened at the inside of the 2nd and 4th piles. A single timber structural member is located at the bottom of each bent, near the ground (photo # 15, 16, 18-20).

Pile abutments support the bridge ends and are provided with backwalls and wingwalls to retain the embankment material (photo # 10-14). The timber pile abutment on the northeast end is comprised of a backwall formed of three stacked horizontal 9" X 17" timbers with stepped ends and is reinforced with five timber piles (photo # 10, 11). The timber pile abutment on the

¹ Denis Gardner, <u>Wood, Concrete, Stone and Steel: Minnesota's Historic Bridges</u> (Minneapolis: University of Minnesota Press, 2008), 18; and <u>www.dot.state.mn.us/bridge/docmentsformslinks/inspection/USFS-</u> <u>TimberBridgeManual</u>, 2-12-13.

² MN/DOT Bridge Inspection Report, 06-04-2009 and field measurements taken October 2012.

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southwest end is comprised of a backwall and wingwalls. The backwall is comprised of four stacked horizontal 9" x 17" timbers with stepped ends and is reinforced with five timber piles. The wingwalls extend away from the trestle forming a right angle with the backwall (photo # 12, 13, 14).

Alterations:

Mn/DOT has not conducted maintenance or repairs since acquiring the bridge in 1992. Aluminum tags located on various piles indicate that some piles were replaced in 1957, however, bridge records confirming this have not been located. The original steel rails were removed from the trestle and replaced with 8412 sq. ft. of timber decking which was attached to the original ties forming a pedestrian and recreational vehicle span. Timber railings were added to each side of the trestle.

Structural Integrity:

A Mn/DOT structure report dated 6-4-2009 indicates the timber piling is in poor condition with advanced decay at the ground line and suggests vehicles heavier than a car should be restricted from using the bridge. Railing members at the northeast end are missing and should be replaced. A hole in the decking exposing the original ties is located in the southeast section of the deck (photo # 24).

Historic Physical Integrity:

The "Railroads in Minnesota, 1862-1956," National Register of Historic Places Multiple Property Documentation Form (MPDF) outlines Integrity Requirements (F, 228-229) for masonry arch, metal truss and reinforced concrete railroad bridges in Minnesota. Only limited discussion is given to wood trestles. Nevertheless, as the bridge type is mentioned in the Integrity Requirements the requirements are relevant to the trestle at Blackduck. The following Integrity Requirements are considered:

- Design: A grade separation structure must retain enough physical features to effectively convey the significance of its engineering design. The most important part of railroad bridges, trestles, viaducts, and culverts is their superstructure, which expresses the engineering principles integral to their design.
- 2. Setting: Grade separation structures eligible under Criterion C do not need to retain integrity of setting.
- 3. Materials: A railroad grade separation structure retains integrity of materials if the superstructure construction materials are original. The presence of the original piers, abutments, decking adds to the overall material and design integrity of a bridge.
- 4. Workmanship: Most components of railroad grade separation structures were mass-produced and do not exhibit the qualities of workmanship.
- 5. Feeling: A structure that retains integrity of design and materials will also retain integrity of feeling.

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County and State Association: A grade separation structure retains its integrity 6. of association if it retains integrity of location, materials, and design.3

The trestle at Blackduck is situated in its original location along the former M&I Railway spanning Coburn Creek. The surrounding environment remains relatively unchanged, thus reflecting integrity of location and setting. Additionally, the structure retains integrity of design, material and feeling; the original components of the substructure including the abutments, pile bents and caps and a chief portion of the original superstructure, the stringers, are intact. Although the MPDF does not provide an in-depth analysis of timber trestle structural types, one essential component of a railroad trestle's design is its trestlework, the collection of pile bents and other structural members forming the substructure; it is what identifies the structural type as a trestle. While the superstructure is the most important part of many bridges, the substructure of trestles is as important; it expresses the engineering principles integral to its design. At Blackduck, the intact trestlework displays design and construction characteristics necessary to effectively convey the significance of its engineering design. Although the original decking and rails have been removed and the present railings are not original to the structure, the trestle retains overall integrity.

³ Summit Envirosolutions, Inc., "Railroads in Minnesota, 1862-1956," National Register of Historic Places Multiple Property Documentation Form, F.228-229.

Minnesota and International Railway Trestle at Blackduck Name of Property

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
 - D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

- A. Owned by a religious institution or used for religious purposes
- B. Removed from its original location

х

- C. A birthplace or grave
- D. A cemetery
- E. A reconstructed building, object, or structure
- F. A commemorative property
- G. Less than 50 years old or achieving significance within the past 50 years

Minnesota and International Railway Trestle at Blackduck

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Areas of Significance (Enter categories from instructions.) ENGINEERING Beltrami, MN County and State

Period of Significance

1902

Significant Dates
1902

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder F. H. O'Brien and York

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The M&I Railway was constructed between the years 1900 and 1907. It operated as a subsidiary of the Northern Pacific and in 1900 was incorporated to

Minnesota and International Railway Trestle at Blackduck

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provide a rail link between Bemidji and Koochiching (now International Falls). The land in this region of north central Minnesota is dense pine forest punctuated with terrain comprised of swamp and marshland. The marshland proved difficult to traverse and required the erection of timber trestles to span the otherwise impassable sinkholes frequently encountered on the route. The M&I Railway Trestle at Blackduck is historically significant for its method of construction and the considerable length required to span Coburn Creek and the surrounding marsh. It is the longest structure on the former M&I and is widely recognized as the most difficult bridge the railroad had to build. It is eligible for the National Register of Historic Places under Criterion C: Engineering. Local significance was attained in 1902, the year construction was completed. The railroad trestle is significant within the Minnesota Statewide thematic context Railroads & Agricultural Development, 1870-1940; Northern Minnesota Lumbering, 1870-1930s; and Railroads of Minnesota, 1862-1956.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

Blackduck is located in north central Minnesota in southeastern Beltrami County. In the late 1800's, homesteaders and lumberjacks were settled along the nearby Blackduck, O'Brien, Cormant Rivers. Soon after, logging companies were established in the area due to the dense pine belts which were among the richest and heaviest in northern Minnesota. In 1900, Blackduck was founded and platted by Marcus Stoner, a Beltrami County surveyor who lived on Blackduck Lake and became known as the "Father of Blackduck."⁴

In 1899 the M&I hired Marcus Stoner to survey and design a railroad grade from the east side of Bemidji northeast into the forest land. Stoner's survey of the anticipated line revealed challenging terrain twenty miles northeast of Bemidji. These difficulties were not comprised of the steep terrain and tight valleys as were previously encountered during the construction of the Brainerd and Northern Minnesota (B&NM) between Brainerd and Bemidji but extremely high water tables and extensive swaths of swamp and marsh that made the extension an "engineering nightmare."5 Construction through the unstable terrain compounded with hot humid weather and unbearable mosquito infestations created an undesirable work environment. The physically demanding conditions of the railroad extension lead to a labor shortage; liberal wages were offered to entice contractors to work on the section between Tenstrike and Blackduck and two hundred laborers were brought in from Minneapolis in order to construct the line.⁶ Construction was initiated in 1900 and concluded in 1907 when the line reached International Falls.

After successfully reaching Turtle Lake and Farley, the first towns outside of Bemidji, the extension to Tenstrike was slowed due to impediments at Erickson Lake. The looming problem was the swampy ground along the surveyed route.⁷ The contractors could not establish proper footing and they attempted

⁶ Bemidji Pioneer, 29 Aug. 1901.

⁷ Luecke, 206.

⁴ <u>Blackduck Diamond Jubilee Bicentennial Book 1901</u> (Blackduck: The American Publishers, 1976).

⁵ John C. Luecke, <u>The Northern Pacific in Minnesota</u> (St. Paul: Grenadier Publications, 2005), 202.

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to fill in the lake but the gravel disappeared as fast as it was dumped. In later years two trestles would subside into the lake before the M&I succeeded in completing the Erickson Lake fill in 1920.[®] The continuation of the line was expected to reach Blackduck by November 15, 1900, however, additional construction complications developed and rumors began to circulate concerning the possibility of the M&I bypassing Blackduck altogether.

Although the M&I finally reached Blackduck on December 9, 1901, construction was halted as the railroad construction crew was faced with an extensive marsh, nearly ½ mile wide.⁹ The crew proceeded to create an earthen berm across the marsh by employing the standard practice of dumping fill on both sides of the marsh. This often proved to be a complex method yielding uncertain results. A transcribed interview on file at the Beltrami County Historical Society describes the ordeals encountered and the methods employed to fill sinkholes confronted on the M&I line:¹⁰

> "... V- When you extended the road up north where did you meet the most swamp in the Right of way what was the hardest stuff to get by.. B- Oh! There was plenty of swamp up there between Margie and Big Falls, and between Little Fork and International Falls. See they had that big muscac in there several miles you see it was from seven to nineteen twenty feet deep. V- What would you do under those circumstances? How would you get a road bed? B- Well they graded up by hand and they laid ties and seal (sic) on it and ran the gravel trains out on that steel and plowed off the gravel. That made the road bed. V- You mean that you buried steel under there? B- No, we ran the gravel train that was out on the steal (sic) what was out on the road bed turned up from the ditch side from ditches. (sic) and we ran the gravel train out there and plow off the gravel. Then the extra would tap it onto the ties. V-I see. B- And that made the road bed. V- And the gravel would sit down and it would add some body to it. B- Yes, it would tamp the gravel in under the ties, and raise the ties up on the gravel. And we would have to haul in enough gravel to fill in all the soft spots. (sic) for the necessary bed ... " (transcription contains exact wording but does not include strikeovers or crossouts).

The above transcribed recollection attempts to explain the complexities of creating a stable road bed across the unstable conditions found in marsh and swamp areas frequently encountered along the M&I line. The unstable areas were filled with gravel to create a firm foundation for the tracks. This process involved laying a section of track and running a gravel train out to deposit the fill. Gravel was tamped down and the rails were further extended on the freshly laid gravel. More gravel was then deposited and tamped allowing for the next section of rail to be laid. The process was continued across the swamp creating a bed of compressed gravel supporting the track.

⁸ David C. Umhauer and Kurt P. Haubrich, <u>Mike and Ike and Morningtown, The Minnesota and International</u> <u>Railway Story</u> (New York: Writers Club Press, 2000), 70.

⁹ Mary Jo Parker, "The History of Blackduck, 1900-1945," <u>Blackduck American</u>, 6 Jan. 1972.

¹⁰ Transcribed interview located at Beltrami County Historical Society – Railroad File # 2009.302.13.

Minnesota and International Railway Trestle at Blackduck

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The gravel fill efforts at Blackduck were met with limited success and the attempt was eventually abandoned as the crew reached a point in the marsh where their work became futile. A swamp of indeterminate depth consumed so much fill that the contractors, Halvorson, Richards & Co., finally gave up and called for a bridge to span Coburn Creek and the adjacent swamp.¹¹ This temporarily ended the railroad extension and left Blackduck as the terminus. As nothing definite had been decided by railroad officials in regard to construction work past Blackduck, it was resolved that a temporary terminal would be erected on the south side of the sinkhole until the crossing could be completed.¹² A depot, roundhouse, turning wye (a triangular shaped arrangement of tracks with switches at all three corners which allows for the turning of railway equipment) and a submerged water tank was also constructed.

The extension across Coburn Creek resumed under the direction of Frank H. O'Brien of the firm F. H. O'Brien and York.¹³ He was retained to build a trestle of unknown length across a sinkhole with unknown stability characteristics. He had to build the trestle straight, with a steam-driven pile drive, and maintain elevation tolerances within a fraction of an inch while not over or under driving the piles. Over driving would result in shattered timber while under driving would not have supported the load.

Construction in this type of environment required that the location of bents for the trestle be carefully aligned with the center line of the railroad. The foundation would then be set and secured by driving piles in the ground and sawing them off at the proper elevation for the caps.¹⁴ The standard formula used in the 1900's to determine a sufficient drive was measured by the completion of six blows with a 2000 pound hammer falling a distance of 20' and failing to drive the pile over an inch.¹⁵ At Blackduck, this rigorous process was further aggravated by the requirement of an unusually long trestle relying on support of an uncertain foundation.

O'Brien and York worked from winter into fall and thought they were finished in September 1902, but another sink required an extension of 60' be added to the trestle.¹⁶ A September 17, 1902, article titled "Railroad Sparks, O'Brien and York Completes Long Trestle, Rail Soon to be Laid," <u>Blackduck American</u>, reads:

The sink hole which occasioned some surprise last fall still gobbles up the earth nearly as rapidly as workmen are able to haul it. It is quite probable that the attempt to fill it will be abandoned and instead an extension of 60 feet will probably be built to the trestle. The work of laying rails will begin as soon as a temporary bridge can be built which will be in a day or two. Later on piling will be driven.

¹¹ Umhauer, 72.

¹² "Contract Completed; Halvorson, Richards & Co. Will Complete Their Work Next Week" <u>Blackduck American</u>, 12 Feb. 1902.

¹³ Northern Pacific Records, Minnesota Historical Society, Blackduck, Minnesota 134.I.6.8.F.

¹⁴ Kirkman and Marshall, <u>Building and Repairing Railways</u>, <u>Supplement to the Science of Railways</u> (New York: World Railway Publishing Company, 1902) 124.

¹⁵ Kirkman, 124.

¹⁶ Mary Jo Parker, "The History of Blackduck 1900 – 1905," <u>The American</u>, 6 Jan. 1972, 11; Umhauer, 71.

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Given the extreme conditions at Blackduck, the construction of the trestle affirms the skills of F. H. O'Brien. He was a veteran bridge builder and although this piece of work was the most difficult on the line, it was accomplished in a comparatively short period of time, a sign of his expertise. It was one of the most difficult bridges O'Brien ever constructed.¹⁷

The arrival of the railroad and completion of the trestle ushered Blackduck into its boom years; lumber soared and business developed rapidly as more than fifty buildings appeared in a three month period branding Blackduck as the "marvel of Beltrami County".¹⁸ The early town had 10 stores, 16 saloons, and 12 hotels in addition to a sawmill, hydroelectric plant and telephone company. Between 1900 and 1910 Blackduck was the headquarters and distributing point for all lumbering operations in eastern Beltrami County.¹⁹

On June 15, 1902, the M&I announced that bids were being accepted for a 15 mile extension north of Blackduck. The contract was given to Foley Bros. and the subcontract to O'Brien and York for the bridgework.²⁰

The M&I reached International Falls in 1907. The extreme conditions encountered in the marsh and swamp lands along the railroad line posed particular difficulties which were addressed and resolved by skilled engineers and laborers who filled marshes and spanned sinkholes with precise and exacting methods allowing the safe transport across stable timber trestles. The trestle spanning Coburn Creek at Blackduck is the longest on the M&I line between Bemidji and Koochiching. The frequency of unstable terrain led to the construction of other trestles, but none as expansive as that at Coburn Creek in Blackduck which was over 700' in length. They include:

Mississippi River, Bemidji 224' Cormorant River 83' 1" Margy Cemetery 90' Near Big Falls 18' Big Falls Bridge 466' Bogs north of Big Falls 31' 5" 29' 8"²¹

The Northern Pacific assumed operations of the M&I in 1937 and purchased it in 1941. In 1970 the Great Northern and Northern Pacific merged to form the Burlington Northern, Inc. (BN). In 1986 the BN vacated the rail alignment

¹⁸ Carole S. Zellie, <u>Historic Context Study for the Brainerd and Northern Minnesota Railway (B&NM) and Minnesota and International Railway (M&I)</u>, Brainerd to International Falls, Minnesota, submitted to Minnesota Department of Transportation, 2007, 21.

²⁰ Umhauer, 79; "Railroads of Northern Minnesota," Railroads – Transportation file at Beltrami County Historical Society.

²¹ Transcribed telephone interview with Rob Rickert, MnDOT, May 20, 2010, on file at Blackduck Area History and Art Center.

¹⁷ "Railroad Sparks, O'Brien & York Completes Long Trestle, Rails Soon to be Laid," <u>Blackduck American</u>, 17 Sept. 1902; Mary Jo Parker Jepson, <u>Blackduck, 1900-1905</u> (N.p. 1971).

¹⁹ Zellie, 38.

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between Brainerd and Bemidji. The former B&NM (between Brainerd and Bemidji) and M&I (between Bemidji and International Falls) lines are now recreational trails and together the adjoining trails extend 210 miles and form one of the longest contiguous railroad bed conversion trails in the nation.²²

The trestle at Blackduck meets the significance and registration requirements outlined in "Railroads in Minnesota, 1862-1956," Multiple Property Documentation Form. Significance requirements (Section F Page 224) state "wood trestles were constructed with relatively short-lived materials and represent simple engineering solutions to grade separations. As individual structures, the vast majority are not historically significant. As most trestles are relatively small, it may be demonstrable that a particularly large or long trestle is historically significant." The registration requirements (Section F Page 226) indicate that a railroad grade separation structure will meet Criterion C if the structure is "A trestle of exceptional length or size."

The trestle at Blackduck was the longest bridge on the M&I and was rivaled in length by few other timber trestles in Minnesota. In fact, discovering a long timber trestle in Minnesota today is unusual, as many trestles have been buried. For example, the 800' timber trestle the Minnesota & Northwestern Railroad erected just north of Kenyon in 1885 had been entirely covered in earth by the turn of the twentieth century. A substantial, yet smaller, timber trestle is still located at Kenyon. In the early part of the twentieth century, the Milwaukee Road built a 300' timber trestle to span a pasture at the eastern section of the town.²³ The bridge is no longer in use and is in a state of continuing deterioration. Some timber trestles evolved into trestles of metal. Recently the large timber trestle in Calumet in northern Minnesota was entirely reconstructed using metal and concrete members, thus it no longer retains its identity as a timber trestle.

The timber trestle at Blackduck remains a good example of an engineering solution to a complex or unusual site condition which resulted in an unusually long trestle. The trestle at Blackduck is rare in design due to the extraordinary length of the structure and the retention of the trestlework that is unique to this type of span.

²² Zellie, 7.

²³ Gardner, 18.

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9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

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"Contract Completed, Halvorson, Richards & Co. Will Complete Their Work Next Week." Blackduck American, 12 Feb. 1902.

"Depot will be Moved: Official Announcement is made of Contemplated Change." Blackduck American, 6 Aug. 1902.

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Parker, Mary Jo. "The History of Blackduck 1900-1905." <u>Blackduck American</u> 6 Jan. 1972 and 20 Jan. 1972.

"Railroads of Northern Minnesota." Beltrami County Historical Society, Railroads - Transportation file.

"Railroad Sparks, O'Brien & York Completes Long Trestle, Rails Soon to be Laid." Blackduck American, 17 Sept. 1902.

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Umhauer, David E., and Kurt P. Haubrich. <u>Mike and Ike and Morningtown, The</u> <u>Minnesota and International Railway Story</u>. New York: Writers Club Press, 2000.

Waddell J.A.L. Bridge Engineering. Vol. 1. New York: John Wiley & Sons, 1916.

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Minnesota and International Railway Trestle at Blackduck

Blackduck	Beltrami, MN
Name of Property	County and State
Zellie, Carol. Historic Context Study for the Brainerd as	nd Northern
Minnesota Railway(B&NM) and Minnesota and Internationa.	l Railway (M&I)
Brainerd to International Falls, Minnesota. Submitted	to Minnesota
Department of Transportation S.P, 1116-22.	

Previous documentation on file (NPS):

- _____ preliminary determination of individual listing (36 CFR 67) has been requested
- ____ previously listed in the National Register
- _____previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey #
- _____recorded by Historic American Engineering Record #_____
- recorded by Historic American Landscape Survey #_____

Primary location of additional data:

- X State Historic Preservation Office
- ____ Other State agency
- Federal agency
- Local government
- University
- Other
 - Name of repository:

Historic Resources Survey Number (if assigned): BL-BKC-012

10. Geographical Data

Acreage of Property less than one acre

Minnesota and International Railway Trestle at Blackduck

Name of Property

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates

Datum if other than WGS84: (enter coordinates to 6 decimal places) Longitude: 1. Latitude: 2. Latitude: Longitude: 3. Latitude: Longitude: Longitude:

4. Latitude:

Or

UTM References

Datum (indicated on USGS map):

X NAD 1927 c	or NAD 1983	
1. Zone:15	Easting: 384260	Northing: 5287060
2. Zone:	Easting:	Northing:
3. Zone:	Easting:	Northing:
4. Zone:	Easting :	Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

The nominated property consists of a rectangle 18 feet wide by 701 feet long, coinciding with the four corners of the trestle.

Minnesota and International Railway Trestle at Blackduck Name of Property

Beltrami, MN County and State

Boundary Justification (Explain why the boundaries were selected.)

The boundary includes the superstructure and substructure of the M&I Railway Trestle at Blackduck.

11. Form Prepared By

name/title:Debra Kellner			
organization:			
street & number: 2729 S. Lake Av	venue	_	
city or town: Duluth	state:	MN	zip code:55802
e-mail dkpk@clearwire.net			
telephone: 218 727-3707			
date: March 2013			

Additional Documentation

Submit the following items with the completed form:

- Maps: A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- Sketch map for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- Additional items: (Check with the SHPO, TPO, or FPO for any additional items.)

Minnesota and International Railway Trestle at Blackduck Name of Property

Beltrami, MN County and State

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property:	Minnesota and International Railway Trestle at Blackduck
City or Vicinity:	Blackduck
County:	Beltrami
State:	Minnesota
Photographer:	Debra Kellner
Date Photographed:	October 2012

Location of Digital Files: 2729 S. Lake Ave., Duluth, Minnesota 55802

Description of Photograph(s) and number, include description of view indicating direction of camera:

Photo # 1 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0001) Trestle, camera facing southeast

Photo # 2 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0002) Southwest approach, camera facing northeast

Photo # 3 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0003) Deck, Camera facing northeast

Photo # 4 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0004) Northeast approach, camera facing southwest

Photo # 5 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0005) West rail and Coburn Creek, camera facing southwest

Minnesota and International Railway Trestle at Beltrami, MN Blackduck Name of Property County and State Photo # 6 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0006) East rail, camera facing southeast Photo # 7 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0007) East rail and Coburn Creek, camera facing southeast Photo # 8 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck 0008) North rail, camera facing down toward Coburn Creek Photo # 9 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0009) Pile, cap, stringer, 1st bent at northeast end, camera facing southeast Photo # 10 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0010) Wingwall of northeast abutment, camera facing southwest Photo # 11 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0011) Pile, cap, stringer, abutment wall of northeast abutment, camera facing north Photo # 12 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0012) Wingwall of southwest abutment, camera facing north Photo # 13 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0013) Pile, cap, abutment wall of southwest abutment, camera facing southwest Photo # 14 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0014) Wingwall of southwest abutment, camera facing southwest Photo # 15 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0015) Bent with sway brace, camera facing southwest Photo # 16 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0016) Bent with sway brace and cross brace, camera facing east Photo # 17 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0017) East side showing substructure and Coburn Creek, camera facing northeast Photo # 18 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0018) West side showing substructure and Coburn Creek, camera facing northeast Photo # 19 (MN Beltrami County Minnesota and International Railroad Trestle at Blackduck 0019)

Sections 9-end page 20

Minnesota and International Railway Trestle at Blackduck

Name of Property

Beltrami, MN County and State

West side showing substructure and Coburn Creek, camera facing southwest

Photo # 20 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0020) West side showing substructure, and rail, camera facing south

Photo # 21 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0021) East side of 1st bent at northeast end, camera facing southwest

Photo # 22 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0022) East side of 1st bent at northeast end, camera facing north

Photo # 23 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0023) Metal sign on east rail, camera facing southwest

Photo # 24 (MN_Beltrami County_Minnesota and International Railroad Trestle at Blackduck_0024) Exposed tie and stringers on east side, camera facing down toward Coburn Creek

Minnesota and International Railway Trestle at Blackduck

Name of Property

Beltrami, MN County and State

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

NPS Form 10-900-a Minnesota and International Railway United States Department of the Interior Trestle at Blackduck National Park Service Name of Property Beltrami, Minnesota **National Register of Historic Places** County and State **Continuation Sheet** Name of multiple listing (if applicable) Section number Additional Documentation Page 1



NPS Form 10-900-a	OMB No. 1024-001
United States Department of the Interior National Park Service	Minnesota and International Railway Trestle at Blackduck
National Register of Historic Places	Name of Property Beltrami, Minnesota County and State
Continuation Sheet	Name of multiple listing (if applicable)
Section number <u>Additional Documentation</u>	Page2

Sketch Map showing Minnesota and International Railway Trestle at Blackduck located on the Blue Ox Trail (former M & I Railway) in southeastern Blackduck.




















































UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Minnesota and International Railway Trestle at Blackduck NAME:

MULTIPLE Railroads in Minnesota MPS NAME:

STATE & COUNTY: MINNESOTA, Beltrami

DATE RECEIVED: 12/20/13 DATE OF PENDING LIST: 1/21/14 DATE OF 16TH DAY: 2/05/14 DATE OF 45TH DAY: 2/05/14 DATE OF WEEKLY LIST:

REFERENCE NUMBER: 13001144

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N COMMENT WAIVER: N

____RETURN ____REJECT _ ACCEPT

ABSTRACT/SUMMARY COMMENTS:

Entered in The National Register of Historic Piaces

RECOM./CRITERIA	
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REVIEWER DISCIPLINE

TELEPHONE DATE

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

Minnesota Historical Society State Historic Preservation Office 345 Kellogg Blvd West, St. Paul, Minnesota 55102 651/259-3451

TO:	Carol Shull, Keeper
	National Register of Historic Places

Denis P. Gardner FROM:

DATE: December 13, 2013

Minnesota and International Railway Trestle at Blackduck NAME OF PROPERTY:

COUNTY AND STATE: Beltrami County, Minnesota

SUBJECT:	National Register:
	⊠ Nomination
	Multiple Property Documentation Form
	Request for determination of eligibility
	Request for removal (Reference No.
	Nomination resubmission

DOCUMENTATION:

- Original National Register of Historic Places Registration Form
 Multiple Property Documentation Form
 Continuation Sheets
 Removal Documentation

Boundary increase/decrease (Reference No.

Additional documentation (Reference No.

- Photographs
- CD w/ image files
- Original USGS Map Sketch map(s)
- Correspondence

Owner Objection

The enclosed owner objections

Do Do not Constitute a majority of property owners

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STAFF COMMENTS:

RE	ECEIVED 228	0
	DEC 20 2013	
NAT. P	EGISTER OF HISTORIC PLAC	ES