

REGION RMR PARK/AREA NAME Zion National Park PARK NUMBER 1590

STRUCTURE NAME Pine Creek Irrigation Canal STRUCTURE NUMBER IR 15

LOCATION OF STRUCTURE Pine Creek Canal PARK LOCATION CODE PG

NATIONAL REGISTER _____ DATE: / / MANAGEMENT CATEGORY: (A) (B) (C) (D)

NPS LEGAL INTEREST FEE MANAGEMENT AGREEMENT No Mgmt. Agreement

Check all of the following categories for which NPS has treatment responsibility:

Stabilization Cyclic Maintenance Routine Maintenance Approved Ultimate Treatment

(ROCKY MOUNTAIN REGION USE ONLY)

APPROVED ULTIMATE TREATMENT OR RESOURCE MANAGEMENT PLAN, CULTURAL COMPONENT DESIGNATION:

Preservation	(PP)	Restoration	(RR)	Reconstruction	(CC)
Adaptive Preservation	(AP)	Adaptive Restoration	(AR)	Adaptive Reconstruction	(AC)
Neglect	(NG)	Remove	(RM)	No Approved Treatment	(NO)

Approval Document _____ () Document Date: / /

Estimated Treatment Costs _____

Stabilization:	\$ _____	Date:	<u>/ /</u>	Level of Estimate:	(A) (B) (C)
Approved Treatment:	\$ _____	Date:	<u>/ /</u>	Estimator:	(Region) (DSC) (A&E)

STATEMENT OF SIGNIFICANCE: Inoperable Park owned irrigation canal of historical and architectural significance.

Date of Construction approx- 1890s Date of Alterations: / / 1934

Architect/Designer: Pioneer/H. Langley Historical Theme(s): Pioneer Settlement-Irrig.

History of Structure: Developed by Zion Canyon agriculturalists in 1890s, the canal drew water off Pine Creek, ran approx. 2 1/2 miles to the S. and irrigated the "island" of cultivated land between the Virgin R. and Bridge Mt. Delivery system became Park property in 1931 with S boundary expansion. Canal headworks extended 1/4 mile N by CCC forces of Camp NP 2 in 1934. Point of diversion was the E bank of the N Fork Virgin R. and water so diverted was flumed over Pine Creek by Public Works built system, built 1934

Evaluation of Structure: Historic Theme Contributing X Non-Contributing _____

National Register Criteria: A X B C D (Include integrity statement)

Although inoperable, the canal retains much of its structural integrity. It has representative examples of pioneer rockwork, water delivery system artifacts and remnants of CCC engineering involvement along its 2 1/2 (approx.) mile course.

Bibliography: Langley, Harry. "Report to Chief Architect, Branch of Plans and Design, Western Division, Dec. 31, 1934." Zion NP Photo Collection, Neg. No. 316 ZIO.

Representation in Other Surveys: No.

If structure has been removed, how? _____ Date: / /

Report prepared by: James Jurale Date: 1005 / 1984

LOCATION: Section 22, unsurveyed State Utah **USE:** CURRENT INTERIOR USE (NPS 28 CODE) N/A
 Township T 41 S County Washington Original Use Irrigation Canal
 Range 10 W Intermediate Uses Irrigation Canal
OWNERSHIP: Present Owner: NPS PERIOD OF CONSTRUCTION (NPS 28 CODE) HI
 Original Owner: Private DRAWING No. _____
 Intermediate Owner(s): NPS NEGATIVE No. HAER No. UT-38-C-1

*****PHYSICAL DESCRIPTION*****

(DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.)

The Pine Creek Canal, which originally drew water off Pine Creek immediately to the northeast of its confluence with the Virgin River, ran to the south at the foot of a talus slope and sent laterals to the west to irrigate the 2½ mile by ¼ mile "island" of farm land located between the east bank of the Virgin River and Bridge Mountain. In 1934, the canal's headworks were extended approx. ¼ mile to the north to augment Pine Creek's sometimes inadequate water supply with water diverted from the Virgin River. Located on the E bank of the Virgin River approx. ¼ mile to the N of the Virgin River Bridge, the extant remains of the headworks which were completed by CCC enrollees in 1934 consist of a 15' diameter red sandstone boulder with steel rods and 2" steel beams that have been drilled and grouted into the rock. This Public Works Project also refurbished the canal's delivery system and was completed by the "juniors" of Camp NP 2. The extant remains of the extension flume over Pine Creek include: sections of steel cable and steel pipe supports, and an approx. 2 ton sandstone boulder with 2 concrete patties on its surface-- one inscribed, 1934, the other with, N. F.

Sections of "dry" random rubble, pioneer-built, rock retaining walls which supported the canal bed are apparent, as well as water delivery system artifacts, such as the well preserved remains of a 15'-long stave pipe flume constructed of oak slats, and wire rings with a 18" diameter, which conveyed water over a gulch located approx. 1/8 mile to the south of Pine Creek. The sketchy remains of an associated irrigation system, the Flanigan Ditch, which reportedly took off from a boulder dam on the west side of the Virgin River opposite the Supts. House and was flumed to the east bank, are also found in the area.

The work conducted in 1934 was under the supervision of Zion National Park Resident Landscape Architect, Harry Langley and directed on-site by Landscape Architect, A.M. Doerner, and Civil Works Project Landscape Architect, George W. Norgard. In September 1934, Harlan B. Stephensen, Landscape Architect on leave from Bryce National Park, was in charge of removing the dead cottonwoods from the banks of the canal between the mouth of Pine Creek and the South

SIGNIFICANT ARCHITECTURAL FEATURES (INCLUDING INTERIOR AND SETTING) FOR PARK PLANNING PURPOSES:

(continued)

Entrance Area.