SEEI	NSTRUCTIONS IN HOW TO TYPE ALL ENTRIES C	O COMPLETE NATIO	NAL REGIS	TER FORMS	SP
1 NAME					
HISTORIC Frequenc	y Changing Station				
2 LOCATION	J				
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Spokane	_	VICINITY OF		- Thomas S.	
STATE Washingt		CODE 053	coun Spok	ΓY	CODE 063
3 CLASSIFIC		000			
CATEGORY	OWNERSHIP	STATUS		PRESE	
_DISTRICT					MUSEUM
_XBUILDING(S) STRUCTURE	X_PRIVATE BOTH	—UNOCCUPIED XWORK IN PROGRESS			PARK PRIVATE RESIDEN
SITE	PUBLIC ACQUISITION	ACCESSIBLE			RELIGIOUS
OBJECT	IN PROCESS	YES RESTRICTED		GOVERNMENT	-SCIENTIFIC
	BEING CONSIDERED	XYES UNRESTRICTED			
		NO	اــــ · =		X_OTHER VACANT
4 OWNER O	F PROPERTY				
NAME Alan B	and Sherry Martin Kim	ball			
STREET & NUMBER	und sherry harem kin		•• <b>_</b>		
Box 38					
CITY TOWN				STATE	n 99173
				Washingto	1 99173
5 LUCATION	N OF LEGAL DESCR				
COURTHOUSE REGISTRY OF DEEDS	ETC Spokane County Co	urthouse - Asses	sor's Offi	ce	
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	W. 1116 Broadway				
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CITY TOWN				STATE	
	Spokane		<del></del>	Washingto	n 99260
6 REPRESEN	<b>TATION IN EXIST</b>	ING SURVEYS			
TÍTLE					
	ne Historic Landmarks	Survey			
Spoka	ne in stor re canaliarits				
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DATE 1977			STATECO	DUNTY XLOCAL	
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CONI	DITION	CHECK ONE	CHECK (	DNE
EXCELLENT	DETERIORATED	UNALTERED	.XORIGINAL	SITE
XGOOD	RUINS	_XALTERED	MOVED	DATE
FAIR	UNEXPOSED			

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Completed in 1908, the Frequency Changing Station housed the electrical equipment associated with the operation of an electric railway centered in Spokane. Originally on the outskirts of the city, it is now located in a built-up area; however its hillside siting above a part has maintained the building in a setting similar to that of 70 years ago.

The Station is built on an L-shaped plan formed by the massing of two attached rectangular units, the main building and a storage battery wing located off the east wall of the main building. The main building is 102 x 76 feet and the storage battery wing is 92 x 42 feet. The main building is over fifty feet high with a medium gable roof and the smaller east wing is less than twenty feet high with a low gable roof, open truss beams, and a brick floor. The main building is essentially a single space with 35 foot walls to the open truss beams. Along the east side of this space is a 14 foot wide mezzanine 16 feet above the main floor; this level is reached either by a cast iron stairway at the north end, or by a foot platform freight elevator at the south end. Beneath the mezzanine is a maintenance shop area of the same width which also extends the full 102 foot length of the building. There is no basement per se, but there are a number of passageways from the maintenance shop area which extend under the main floor.

The exterior wall material is brick laid in a common bond, a course of headers every sixth stretcher course. The walls are 10 inches thick with 24 inch square pilasters on 16 foot centers. The brick is painted on the interior.

A single stack chimney is located at both the north and south ends of the main building; these are concealed within pilasters and the decorative parapet and are not visible. Roof trim consists of a three foot eave projection with exposed rafters. The north and south walls extend to a parapet with a cornice peak and steps capped with cut stone. The wall design is a combination of pilasters, raised panels and entablatures extending from a plain stone plinth.

The extensive fenestration is of four types. The lower level windows are double hung wooden sash, six feet wide and 10 feet high with 40 lights; the upper level windows are stationary single sash, six feet wide and five and one half feet high with 20 lights; the north and south ends each have an eight foot diameter bulls eye window centered above the entrances; and the double leaf entry doors are balanced by a pair of windows of the same general proportions as the doorway itself. The two door and window groups are topped by a fanlight. All the windows have a plain lintel and sill of raised masonry; the fanlights are set with keystones. The east wing repeats the design of the main building except that the window area constitutes much less of the wall area.

The main building was designed to house four motor generator sets, four 1250 kw transformers, three 375 kw transformers, and three 75 kw transformers. The east wing was added not long after the completion of the larger structure and contained a 550 volt (275 cell) chloride accumulator, or storage battery, with switchboard and exciter attachments. All of the equipment was removed apparently in 1939, when the property was sold by the owning railroad. Despite the absence of the electrical apparatus, the Frequency Changing Station remains a little altered representative of Spokane's railroading prominence.

PERIOD	AF	EAS OF SIGNIFICANCE CH	ECK AND JUSTIFY BELOW	
PREHISTOHIC	ARCHEULUGY PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION
1400-1499	-ARCHEOLOGY HISTORIC	CONSERVATION	_LAW	SCIENCE
1500 1599	AGRICULTURE	ECONOMICS	LITERATURE	SCULPTURE
1600 1699	ARCHITECTURE	EDUCATION	MILITARY	SOCIAL/HUMANITARIAI
	ART	ENGINEERING	MUSIC	THEATER
1800 1899 X_1900		EXPLORATION/SETTLEMENT INDUSTRY INVENTION	PHILOSOPHY POLITICS/GOVERNMENT	X.TRANSPORTATION

## STATEMENT OF SIGNIFICANCE

The Frequency Changing Station was an important part of an early electrical power and transportation conglomerate. The name most often associated with this development is Jay P. Graves, the man who organized several small inter-urban lines into an extended system which connected Coeur d'Alene, Moscow and Colfax with Spokane; a system known (under Gravés) as the Spokane and Inland Empire Railroad Company and finally (when held by the Great Northern Railroad) as the Spokane, Coeur d'Alene and Palouse Railway. Graves was also in the directorship of the Spokane Power Development Company which supplied power for this rail system and sold power and light commercially as well.

The Frequency Changing Station distributed power generated by the Inland Power Plant at Nine Mile, northwest of Spokane, to a rail system that not only transported people and commodities, but also provided communication by the Postal Telegraph and Cable System and sold the first electricity to communities along the route.

The Spokane and Inland Empire Railroad Company was a prime factor in the rapid development of the area through which its tracks passed. The communities south to Colfax and Moscow, the routes served by the Frequency Changing Station, were linked to Spokane which by 1908 had become the major rail center of the Northwest.

Spokane and Inland advertising brochures of the day stated that "896,885 acres, or over 80 per cent of the tillable soil in Whitman County, is now under cultivation. The Spokane and Inland intersects this mammoth garden spot, not with one railway line, but with two, and reaches, with few exceptions, all the principal towns of the county". Similar claims were made regarding other nearby areas and went on to mention that the average haul from the farms to a rail station or warehouse was four miles.

The Frequency Changing Station had a critical role in the railroad network. Receiving power from the hydroelectric plant at Nine Mile, the station delivered direct current to the streetcar system within the city of Spokane. At the same time, it also converted a portion of the power to alternating current for transmission to a series of substations placed about fifteen miles apart on the operating line. The substations converted power back to direct current to operate the facility outside Spokane and also sold 110 AC to the neighboring communities. The cost of electricity used by the railroad was computed at peak usage. To reduce the peaks, the storage battery was installed shortly after the construction of the original plant. The storage battery was charged when demands on the system were low, and was discharged when demands were high, thus reducing the amount of peak power drawn from the Nine Mile generators. The batteries were attributed with a saving of 50 per cent in power costs.

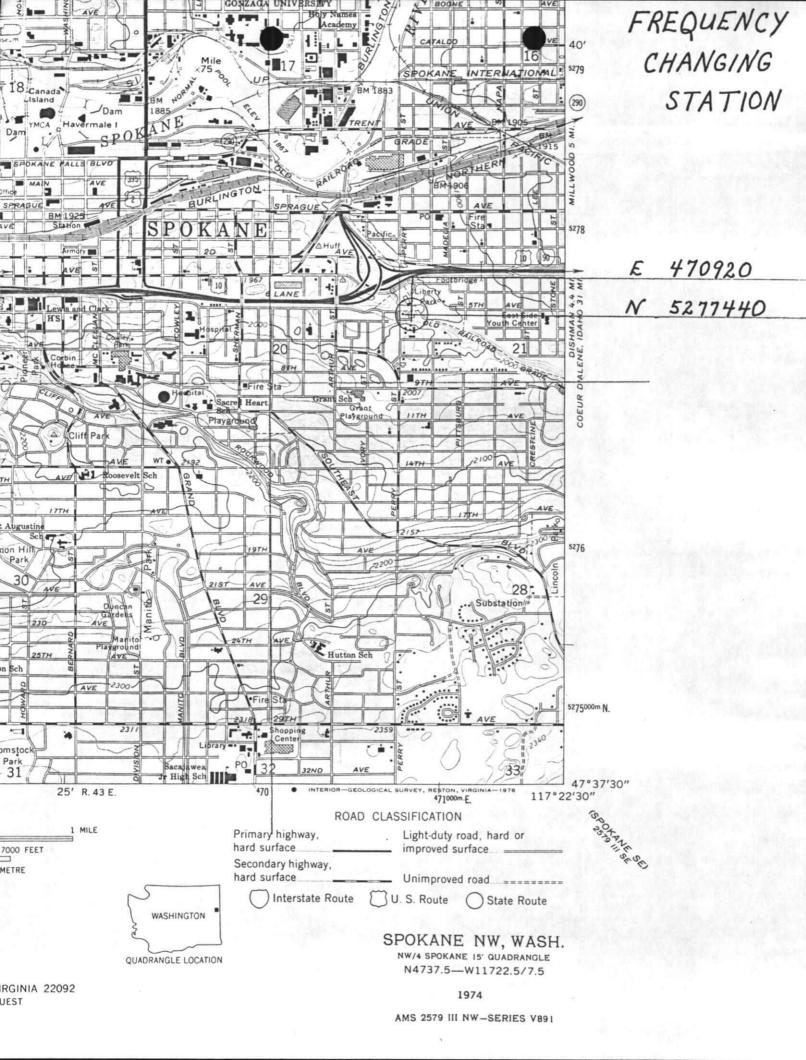
## 9 MAJOR BIBLIOGRAPHICAL REFERENCES

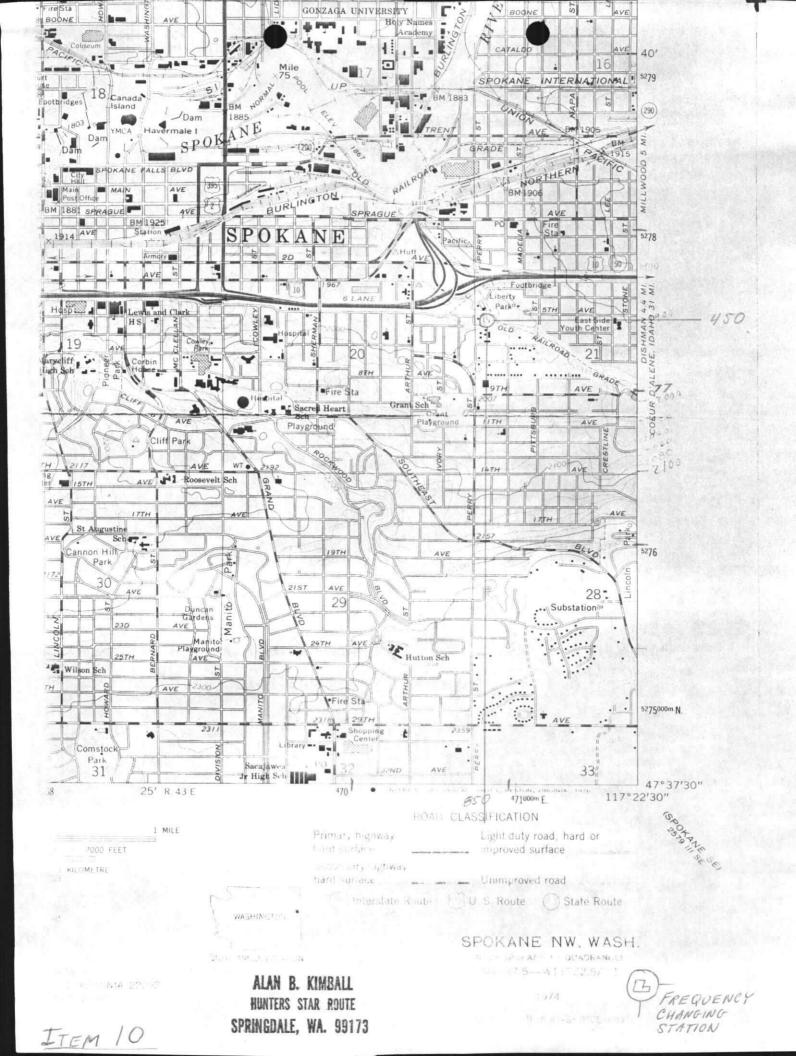
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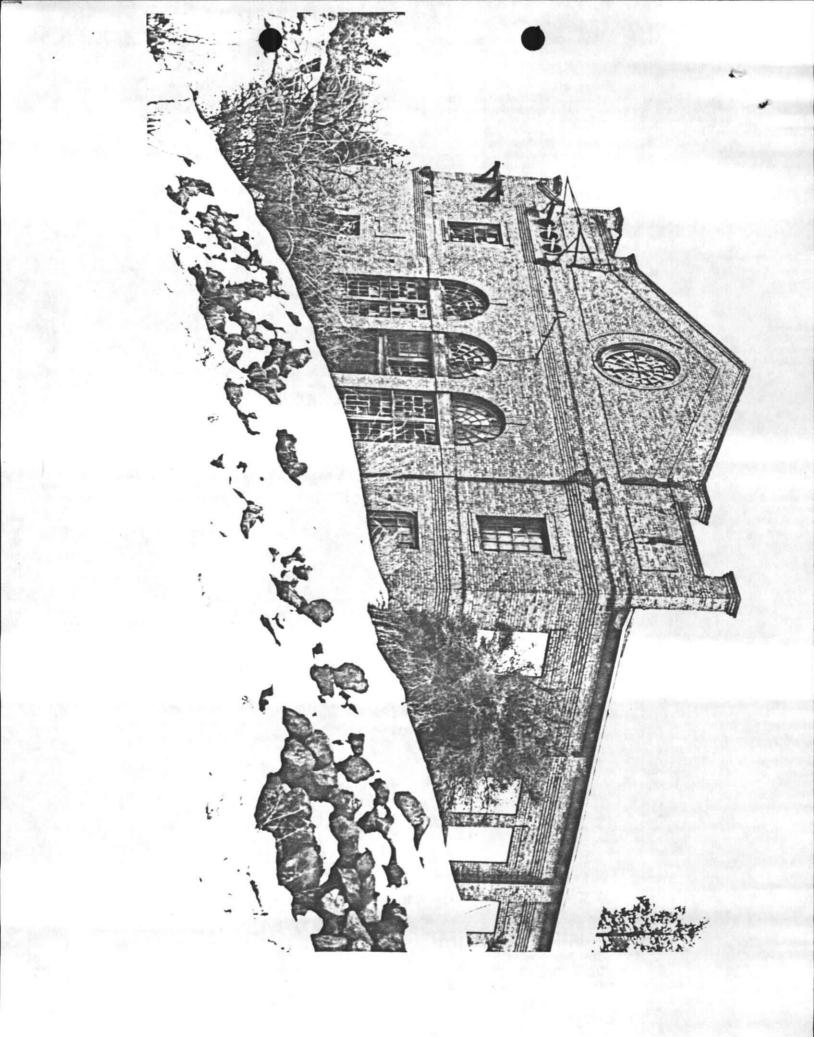
- . "Phase Changing and Battery Plant," Electric Railway Review, October 26, 1907.
  - Flagg, Charles E. "Spokane and Inland Empire Railroad," n.d. Eastern Washington Historical Society Library.

"Spokane's Electric Railroads," n.d., Eastern Washington Historical Society Library.

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Springdale			Washingto	n
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hereby nominate this property	ric Preservetion Officer for the y for inclusion in the National th by the National Park Service on OFFICER SIGNATURE	Register and certify the	vation Act of 1966 (Pu at it has been evaluate	iblic Law 89-665) I ad according to the
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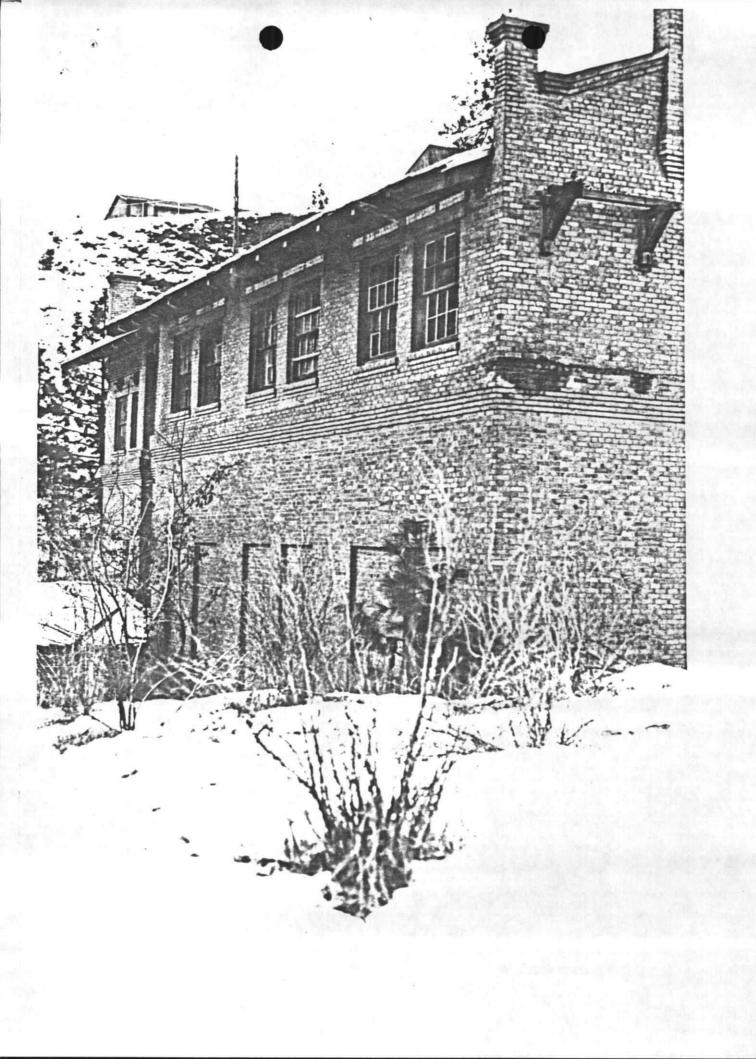
1 of 4

View of northeast corner

Claire Bishop December 1978 Washington State Office of Archaeology and Historic Preservation Frequency Changing Station Spokane, Washington



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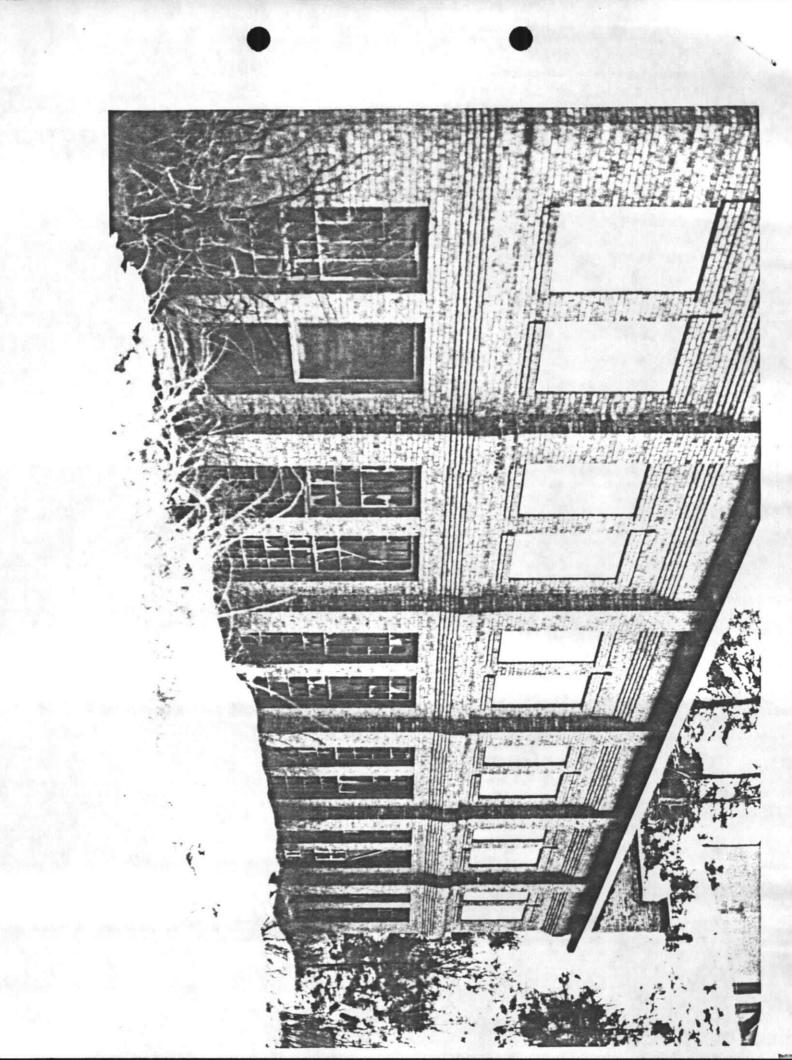


Frequency Changing Station Spokane, Washington

Claire Bishop December 1978 Washington State Office of Archaeology and Historic Preservation

East elevation

3 of 4



Claire Bishop December 1978 Washington State Office of Archaeology and Historic Preservation 4 of 4 West elevation

Frequency Changing Station Spokane, Washington

