

Spokane Register of Historic Places Nomination

*Spokane City/County Historic Preservation Office, City Hall, Third Floor
808 Spokane Falls Boulevard, Spokane, Washington 99201-3337*

1. Name of Property

Historic Name: Dwinnell House and Fallout Shelter
And/Or Common Name: Robert and Elsa Snow House

2. Location

Street & Number: 504 W. 19th Avenue
City, State, Zip Code: Spokane, WA 99203
Parcel Number: 35301.2114

3. Classification

Category	Ownership	Status	Present Use	
<input checked="" type="checkbox"/> building	<input type="checkbox"/> public <input type="checkbox"/> both	<input checked="" type="checkbox"/> occupied	<input type="checkbox"/> agricultural	<input type="checkbox"/> museum
<input type="checkbox"/> site	<input checked="" type="checkbox"/> private	<input type="checkbox"/> work in progress	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure			<input type="checkbox"/> educational	<input checked="" type="checkbox"/> residential
<input type="checkbox"/> object	Public Acquisition	Accessible	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
	<input type="checkbox"/> in process	<input type="checkbox"/> yes, restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes, unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
		<input checked="" type="checkbox"/> no	<input type="checkbox"/> military	<input type="checkbox"/> other

4. Owner of Property

Name: Thomas P. and Sheryl L. Piskel
Street & Number: 504 W 19th Avenue
City, State, Zip Code: Spokane, WA 99203
Telephone Number/E-mail: Enter property owner's telephone number and email

5. Location of Legal Description

Courthouse, Registry of Deeds	Spokane County Courthouse
Street Number:	1116 West Broadway
City, State, Zip Code:	Spokane, WA 99260
County:	Spokane

6. Representation in Existing Surveys

Title: An Historic Property Inventory of the Cannon Hill Park Neighborhood
Date: 2008 ☐ Federal ☐ State ☐ County ☒ Local
Depository for Survey Records: Spokane Historic Preservation Office

7. Description

Architectural Classification

Condition

- ☒ excellent
- ☐ good
- ☐ fair
- ☐ deteriorated
- ☐ ruins
- ☐ unexposed

Check One

- ☐ unaltered
- ☒ altered

Check One

- ☒ original site
- ☐ moved & date _____

Narrative statement of description is found on one or more continuation sheets.

8. Spokane Register Categories and Statement of Significance

Applicable Spokane Register of Historic Places category: Mark "x" on one or more for the categories that qualify the property for the Spokane Register listing:

- ☒ A Property is associated with events that have made a significant contribution to the broad patterns of Spokane 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 history.
- ☐ E Property represents the culture and heritage of the city of Spokane in ways not adequately addressed in the other criteria, as in its visual prominence, reference to intangible heritage, or any range of cultural practices.

Narrative statement of significance is found on one or more continuation sheets.

9. Major Bibliographical References

Bibliography is found on one or more continuation sheets.

10. Geographical Data

Acreage of Property: Less than one acre
Verbal Boundary Description: Canon Hill Park, Block 7, Lots 15-16
Verbal Boundary Justification: Nominated property includes entire parcel and urban legal description.

11. Form Prepared By

Name and Title: Betsy H. Bradley
Organization: Enter your organization if applicable
Street, City, State, Zip Code: 417 W 29th Avenue, Spokane, WA 99203
Telephone Number: 509 822-0300
E-mail Address: betsy.bradley1@gmail.com
Date Final Nomination Heard:

12. Additional Documentation

Additional documentation is found on one or more continuation sheets.

13. Signature of Owner(s)

14. For Official Use Only:

Date nomination application filed: _____

Date of Landmarks Commission Hearing: _____

Landmarks Commission decision: _____

Date of City Council/Board of County Commissioners' hearing: _____

I hereby certify that this property has been listed in the Spokane Register of Historic Places based upon the action of either the City Council or the Board of County Commissioners as set forth above.

Megan Duvall
City/County Historic Preservation Officer
City/County Historic Preservation Office
Third Floor – City Hall
808 W. Spokane Falls Blvd.
Spokane, WA 99201

Date

Attest:

Approved as to form:

City Clerk

Assistant City Attorney

Summary

The house at 504 W 19th Avenue occupies a corner site at the intersection of 19th Avenue and S. Stevens Street. It is one of the properties at the perimeter of Cannon Hill Park that was developed after the first period of construction; 608 W 19th Avenue was built in 1939 and 614 W 19th Avenue was erected the following year.

Henry G. Mansur, a custom house builder, erected the house for Robert H. and Elsa Snow in 1941; no architect was entered on the building permit. The one-and-one-half story house with a brick veneer is set back from a raised front lawn edged with a basalt rubble retaining wall (Fig. 1). Later owners, Dr. Leonard and Nota Dwinnell, built an underground fallout shelter north of the house, as well as an addition to their garage to conceal the escape hatch from the shelter in 1961. The presence of the fallout shelter establishes the historic significance of the property as an example of the pattern of building residential fallout shelters in Spokane during 1959-1961 period.



Fig. 1. 504 W 19th Avenue, facing northwest.

Description

The rectangular lot is located at the corner of 19th Avenue and S. Stevens Street, across the street from the St. Augustine, now Cataldo, school and parish property. Further west, the long south side of the block faces Cannon Hill Park. The east end parcel has an oblique view of the park, as directly south of it are properties on the east side of Stevens Street (Fig. 2).

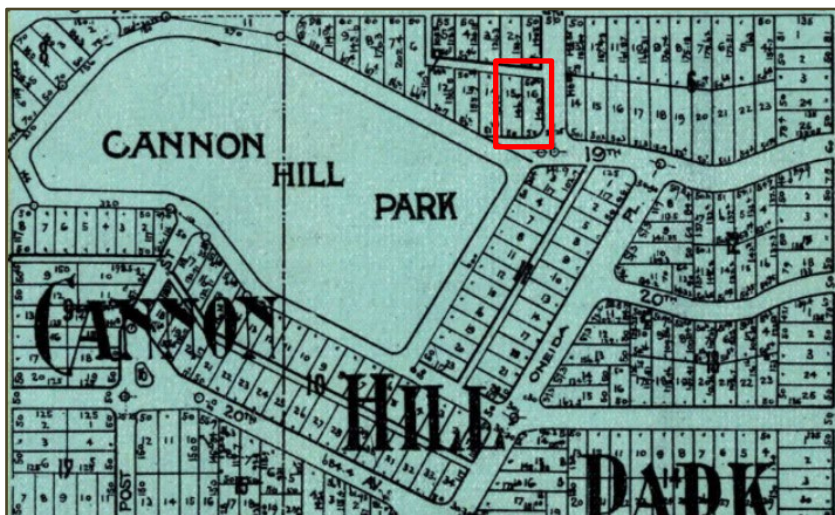


Fig. 2. Canon Hill Park Plat with 504 W 19th Avenue parcel outlined.

The parcel was leveled with the construction of a retaining wall of roughly cut and coursed basalt on its south edge, adjacent to the concrete public sidewalk. Steps at the retaining wall join a sidewalk and paved area with modern brick pavers and steps to the stoop at the front door; *welcome* is scored in the paving. The rectangular house is set on the west half of the parcel; its front door faces 19th Avenue and a side yard adjacent to S. Stevens Street is fenced. At one time this side yard hosted an

orchard; a pear tree and a cherry tree remain. An alley extends through this block, and the garage and its addition are positioned adjacent to the alley.

The House. The house has a raised basement under the southern two-thirds of the structure. Basement windows include one in a tripartite configuration on the façade set beneath the large three-paned window above. The entire house is clad with a dark red, gray and nearly black clinker brick, with the projecting irregular bricks common in that style of cladding. A complex steeply-pitched hip roof has an intersecting hip form covering the east portion of the structure. A small semi-circular glazed vent is positioned halfway up the south slope of the roof. The brick chimney rises through the western roof ridge (Fig. 3). The house has enclosed eaves with a narrow overhang.



Fig. 3. South-facing façade.

The entrance is on the east side of the south-facing façade. A steep flight of steps, edged with wrought-iron handrails and flaring outward slightly at the bottom, leads to a projecting stoop somewhat wider than the entrance. The door is set in a deep paneled surround edged with traditional molding. Both this molding, and that surrounding the large tripartite-window to the west are set just below the roof fascia. A wrought-iron window box holder is installed at the base of the large façade window. A double column of glass blocks fills the coat closet window at the south end of the east façade. Traditional in shape and size, double-hung windows light the projecting dining room and kitchen that comprise the east side of the house, and pierce the west wall to light the living rooms and the bedrooms at the northwest corner of the house. A sunporch

at the northeast corner of the house has been incorporated into the house for some time (Fig. 4; exterior brick forms the west wall of this space.

The Interior. The interior of the house initially consisted of a living room (Fig. 5), dining room, kitchen, half bath, and three bedrooms and a full bath on the main floor. The molding around door frames and windows is a reeded pattern. The owners of the house during the early 21st century, reconfigured the interior, creating a master suite of two bedrooms and the main bathroom and a larger kitchen. This area was reconfigured and updated again in 2022.



Fig. 4. Northeast portion of the house, facing southwest.



Fig. 5. Living Room, facing northwest showing fireplace and historic windows.

Stairs rise from the living room to the attic level, which was finished at some point with a bathroom, a bedroom, and a large L-shaped open area; skylights were installed at that time. Stairs to the basement are beneath those to the upper level. The basement has been divided into rooms on the south end and there is a second fireplace below the one in the living room. A narrow door has been installed in the central hall area of the basement that gives access to what was the crawl space below the north end of the house.

The Fallout Shelter. The fallout shelter is located underground between the house and garage (Fig. 6). The area between the garage and house used to have two ventilation pipes above ground that served the shelter. They were removed when paving and raised planters were added to this area. Shelter construction consisted of a full-height hallway through the crawl-space north

portion of the basement; the masonry fallout shelter, and the steel tunnel and perpendicular section that gives access to the hatch under the addition to the garage.



Fig. 6. Location of the underground fallout shelter

A narrow door provides access to the narrow passageway created through the crawlspace to and beyond the original foundation of the house (Fig. 7). Concrete block walls edge the narrow, 22-inch-wide walkway, which has a poured concrete floor. It steps down in elevation as it passes through the foundation to the lower level of the shelter floor. The walls of the hallway at this point are poured concrete. Prior to giving access to the shelter, it takes a right-angle turn to the west (Fig. 8). An installed light fixture illuminates the point where the hall takes a 90-degree turn.

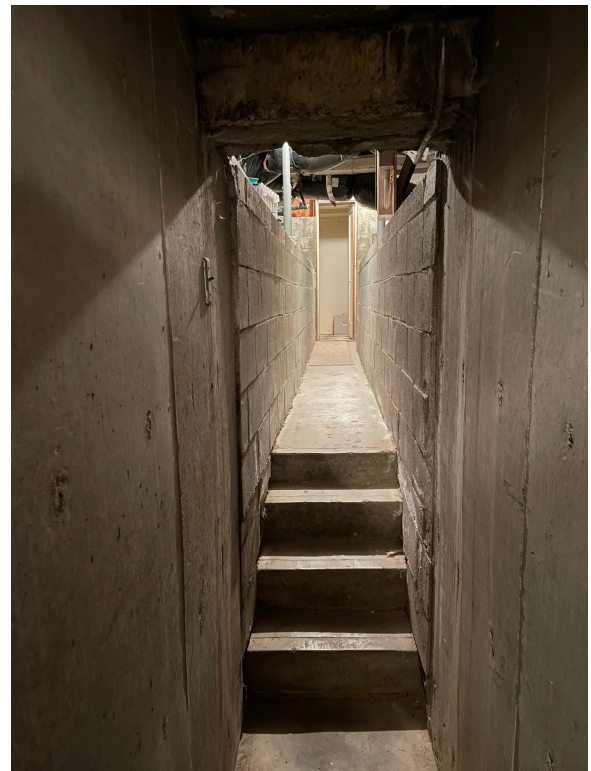


Fig. 7. Walkway through the crawl space; crawl space visible on left; steps to lower level of shelter floor on right. Level of shelter floor on right.

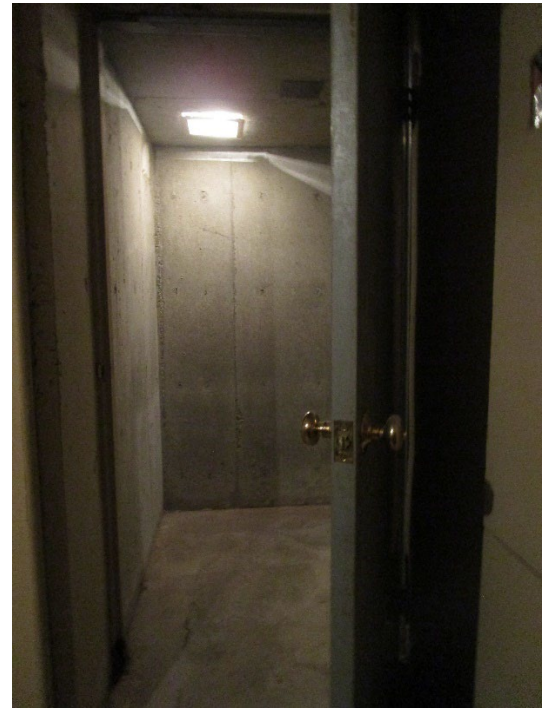


Fig. 8. Entrance to the shelter protected with a right-angle turn.

The finished interior shelter room is 7'7" x 10'2", and 6'4" tall. The floor is poured concrete. The walls and ceiling appear to be furred out and lined with a painted plywood; a simple covered molding was applied at the upper wall edge and corners to cover the joints (Figs. 9 and 10). The construction material of the main shelter walls is not visible, but the poured concrete in the recessed shelves and surrounding the tunnel opening suggest that it is also poured concrete. The door between the hallway and the shelter is clad with sheet steel on both sides (see Fig. 8). A light fixture is installed in the center of the ceiling. A water spigot is positioned in the south wall.





Fig. 9. View of the shelter, facing southwest.

The northwest corner of the shelter was the “utility area.” It appears to have been plumbed for a toilet with a waste vent low in the wall. A manually-operated “air blower,” the type pictured in shelter manuals (Figs. 10 and 12) is mounted at the north end of the west wall. The blower had to be hand cranked periodically to move air into the exhaust pipe, according to a shelter manual. Two ventilation pipes extended above the shelter: one was near the south wall of the garage addition and the other was at the western fence line.

The north end wall, closest to the garage addition, has a central opening where the steel tunnel encased with concrete extends (Fig. 12). A plywood panel covering for this opening has two handles on the room side to aid lifting it into place and is secured with four bolts. The wall area to the east has recessed shelves above a safe set on the floor. A wood-framed bunk bed stands adjacent to the west wall (see Fig. 9). It is the only historic furnishing left in the shelter.



Fig. 10. View of the shelter, north wall and northeast corner.



Fig. 11. Air blower in situ on the shelter wall with plumbing for toilet below it



Fig. 12. Tunnel access point with plywood panel removed.

The Garage. The garage consists of two separate sections, the eastern portion built in 1941 (Fig. 13) and the western section dating from 1961 (Fig. 14). Both portions have clinker-brick walls and the two portions are united by a steeply-pitched hipped roof. The vehicle door for the 1941 section faces east. The vehicle door for the 1961 section is set under an intersecting gable roof form and faces north and the alley. Both portions of the garage have man doors in their south walls, facing the house. The 1961 section of the garage has a concrete manhole-like hatch that has a metal handle. It is located near the south wall of the garage and on the west side, so a centrally parked boat or car would not cover it (Fig. 15).



Fig. 13. 1941 portion of the garage, facing southwest.



Fig. 14. 1961 portion of the garage, facing southeast.



Fig. 15. Floor of 1961 garage.

ORIGINAL APPEARANCE & SUBSEQUENT MODIFICATIONS

The exterior of the house at 504 W 19th Avenue is little changed from its appearance in 1961, the period of significance for this property, as well as from 1941, when built. At some early date, the porch at the northeast corner of the house was incorporated into the house and has been extended by a few feet to the north. It is likely that the upper level, which has a sloping ceiling, was converted from an attic to occupiable space by the Dwinnell family or later owners. During the 2022 interior remodeling project, a larger window replaced two separate windows in the east side wall of the kitchen area. Interior alterations are limited to the bedroom and kitchen area. There have been no modifications to the fallout shelter.

HISTORIC INTEGRITY

The Dwinnell House has good historic integrity in terms of design, materials, and workmanship, and very good integrity of location and association. The fallout shelter has very good integrity in all aspects of historic integrity. The house and shelter have been well-maintained and the historic appearance of the 1941 and 1961 time periods remains very strong as the Snow and Dwinnell residence, as well as for the 1961 fallout shelter.

SECTION 8: STATEMENT OF SIGNIFICANCE

<i>Area of Significance</i>	<i>Category A – Broad Patterns of History</i>
<i>Period of Significance</i>	<i>1961</i>
<i>Built Date</i>	<i>1941</i>
<i>Architect</i>	<i>Unknown</i>
<i>Builder</i>	<i>Henry G. Manser</i>

The Dwinnell House and Fallout Shelter, 504 W. 19th Street

Summary

The Dwinnell House and Fallout Shelter, 504 W 19th Avenue, is eligible for listing in the Spokane Register of Historic Places under Category A in the area of Cold War social history as an historic example of the construction of home fallout shelters in Spokane during the 1960-1961 heyday of such activity. The house was constructed in 1941 on a large corner lot by Spokane builder Henry G. Manser for Spokane businessman Henry R. Snow and his wife, Elsa, after their children had become adults and no longer lived at home. Dr. Leonard Dwinnell and his wife, Nota, purchased the house soon after they relocated to Spokane in 1954. The Dwinnells built the fallout shelter in 1961, as well as an addition to the garage to conceal the second means of egress from the shelter. The fallout shelter is described on the Building Permit as a “standard O.C.D. shelter S.O. 5,” although that plan for a shelter has yet to be found. Nevertheless, it is of a size, location under the yard, and with recommended features per federal government advice for erecting shelters from 1959-1962. It is an example of the national response to the Cold War fear of radiation, as well as an enthusiasm for building shelters in Spokane in 1961, its period of significance. The shelter is unchanged from its original form and some of its historic furnishings remain in place; its historic integrity is very good. The house appears on the exterior quite similarly to how it looked when the Dwinnell family occupied it; the interior of the house has been updated more than once in the kitchen and bedroom areas.

Statement of Significance

The Cold War era, considered to be the contest between two super-powers, the United States and the Soviet Union, began in 1947 and continued until the dissolution of the Soviet Union in 1991. One of the most intense periods of nuclear arms build-up, positioning, and posturing occurred between 1947 and 1962, followed by a gradual reduction in tensions.¹ Spokane, due to its location; proximity to the Fairchild Air Force Base; and as a railroad transportation hub; was considered to be a target if the Cold War heated up to an actual war. The residents of Spokane were well aware of the Cold War situation and news and probably felt a heightened sense of vulnerability. Residents of Spokane, though, could work together to create public shelters and construct fallout shelters in their own homes.

¹ “Cold War,” Britannica website, <https://www.britannica.com/event/Cold-War>, accessed July 20, 2022.

While the numbers of fallout shelters constructed in Spokane is unknown, the presence of several construction companies that advertised shelter construction services during 1960-1961 suggests that more than a handful of shelters were constructed in the city. The Dwinnell shelter was permitted in October 1961, during a period of few weeks when over two dozen permits were issued.² The Dwinnells had the means, an obvious interest in having their own shelter, and engaged one of the construction firms in Spokane that advertised shelter construction services. The Dwinnell shelter, intact and partially furnished, provides an example of home fallout shelter construction in Spokane during the 1960-1961 period.

Historic Context: Taking Cover in Spokane: Building Residential Fallout Shelters, 1953-1961

Note: Lee O'Connor's *Take Cover, Spokane: A History of Backyard Bunkers, Basement Hideaways, and Public Fallout Shelters of the Cold War* book provides an overview of the construction of residential fallout shelters as well as public ones. This context relies on O'Connor's book; some additional stories in the *Spokesman Review* and *Spokane Chronicle* newspapers have been added to this narrative.³

The Need to "Take Cover" in Spokane

As early as 1950, Spokane was considered to the site of "total destruction" in a nuclear war. Later the term "zone of complete destruction" was used in a Washington State Civil Defense Department report in 1962.⁴ The federal government confirmed this point of view by including Spokane in a list of 271 potential targets of atomic attack in 1951, although this information was restricted until 1953. Residents of Spokane feared direct bomb hits, firestorms, and fallout.⁵

Spokane was a target for several reasons. It was a railroad hub, had over 180,000 residents, and was an important industrial center during World War II. Perhaps more importantly, Spokane was an Air Force town. U.S. Air Force B-36 Peacemaker bombers were stationed at Fairchild Air Force Base from 1951 to 1956, twelve miles from the city. B-52 Stratofortress bombers arrived in 1956 and remained at the base into the 1990s. Spokane was in the midst of nine Air Force ICRM bases from 1960 to 1965. Since these weapons could deliver nuclear weapons to the Soviet Union, many thought Spokane and Fairchild Air Force Base were targets for the Soviets.⁶ Spokane's location heightened fears that planes and missiles would strike from a route over the North Pole. During the 1950s, volunteer civilians assisted the Air Force with "Operation Skywatch," reporting

² O'Connor, p. 62.

³ Lee O'Connor, *Take Cover, Spokane: A History of Backyard Bunkers, Basement Hideaways, and Public Fallout Shelters of the Cold War* (self published 2014; digital edition).

⁴ O'Connor, Figures 4 and 5.

⁵ O'Connor, "Shelter Mania" section addresses all of these fears.

⁶ O'Connor, pp. 4-5.

aircraft flying over the region; the center for accepting and processing this data was located in Spokane, and was known as the Filter Center.⁷

Clyde J. Chaffins, Spokane County Civil Defense Director, introduced the concept of basement shelters for protection from an atomic bomb to Spokane residents in March, 1953. He had witnessed an atomic blast, as well as the protection that underground shelters afforded to those near the blast earlier that month. This interest was short-lived, though, as Spokane County selected evacuation as the preferred strategy for surviving nuclear war.⁸ Many cities developed evacuation plans rather than promote the construction of shelters during the 1950s.

During the late summer 1961 after President Kennedy's "Berlin Crisis" speech of July 25, "shelter mania" took hold in Spokane, as in other parts of the U.S. Kennedy asserted that people who had shelters could be saved in the event of an attack. He outlined a public shelter program and suggested that citizens take steps to protect themselves as well. Spokane residents were receptive to the message. While some wondered about the effectiveness of shelters, Clyde H. Friend, Spokane's Civil Defense director, promoted them in 1961 as "the best single-premium insurance which is possible to buy."⁹



Fig. 16. Photos of the Bonita and Michele Brown in the family's fallout shelter.

Chester L. Brown, chief of Spokane's Civil Defense Communications Division, announced in 1958 that he had constructed an underground shelter adjacent to his home at East 2213 29th Avenue. Brown's shelter was 12-feet square, had concrete block walls and a two-foot-thick reinforced concrete roof. Both the two-foot-wide hall, with doors at each end, and the room had air intake and exhaust devices that could be operated by hand. Brown stocked the shelter with food and water to last two weeks (Fig. 16).¹⁰

⁷ O'Connor, p. 72.

⁸ O'Connor, pp. 52-53; Spokane had a practice evacuation.

⁹ O'Connor, p. 4

¹⁰ O'Connor, p. 65.

Spokanites began to read more about and see shelters during the early 1960s. Curtis C. Vandervert allowed the federal Office of Civilian and Defense Mobilization agency and the Spokane Civil Defense program to construct a model shelter in his yard. This structure of reinforced-concrete was approximately 9 by 12 feet¹¹ and 6.5 feet tall. Burt Jessmore, manager of Northwest Contract Builders, noted that he had sold concrete and small shelters, and built Vandervert's model shelter. The National Construction Company also claimed it had built this shelter. Jessmore estimated that there were 25 shelters in Spokane in August 1960.¹² During the summer of 1960, 400 families visited the demonstration shelter; on one Sunday in October 1961, 600 people visited the shelter.¹³

The Spokane civil defense program promoted pamphlets about shelters and the fact that local building supply businesses had materials for constructing them in April 1960. The available pamphlets might have included *Facts About Fallout* (1955), *Facts About Fallout Protection* (1958) and *The Family Fallout Shelter* (1959). The *Facts About Fallout Protection* was featured on several billboards in Spokane to announce its availability. Images from these pamphlets and promotional material projected calmness and suggested do-it-yourself projects (Fig. 17). Yet, the message in *The Family Fallout Shelter* was clear: "No matter where you live, a fallout shelter is necessary insurance." *Fallout Protection: What to Know and Do about Nuclear Attack*, issued at the end of 1961 emphasized do-it-yourself home shelters and provided information on how to furnish them, as well as the community shelter systems.¹⁴



Fig. 17. Promotional material for the 1959 Family Fallout Shelter brochure suggesting that American families could build their own shelters.
Source: <https://miscman.com/product/j606the-family-fallout-shelter/>

¹¹ Jessup described it as having a 8-foot by 8-foot living area.

¹² "Several Build Own; 25 A-Fallout Shelters Estimated in Spokane," *Spokane Chronicle* 15 August 1960, p. 10.

¹³ O'Connor, p. 72;

¹⁴ O'Connor, p. 60; *The Family Fallout Shelter*, p. 19 (quote); Department of Defense, Office of Civil Defense, *Fallout Protection: What to Know and Do about Nuclear Attack* December 1961.

A message from the civil defense program was accompanied by photographs of the Brown daughters in the shelter their father built in 1958 (See Fig.16). Clyde Friend praised shelters as being effective and of reasonable cost; he had a modest and inexpensive one in his basement. A “Build it Yourself” column in the *Spokane Chronicle* included lists of materials need and discussed the best locations. Contractors were encouraged to include shelters in plans for new construction.¹⁵

Dewey Allsop was happy to share the details about the 14-foot by 15-foot concrete shelter that he constructed himself. He felt war was imminent – likely to start in 1963 – so he undertook construction in 1961. A tunnel connected the basement to the shelter and there was an escape hatch in the yard; both had thick concrete slab doors. The shelter was accessed via a door set flush in the yard and steep steps.¹⁶

By mid-1961, the idea of having a home underground shelter was popular. The Spokane City Council voted to waive building permit fees for the construction of shelters. Clyde Friend noted that the Civil Defense Office was fielding many calls about shelters and food supplies. Denton R. Vander Poel noted in a letter to the editor of the *Spokesman-Review* that the interest in building bomb shelters “hit Spokane like a megaton of bricks.”¹⁷ First National Bank advertised “Fallout Shelter Financing” loans in November 1961. The General Store on N. Division St. advertised surplus Government metal bunkbeds ideal for fallout shelters – or the cabin.¹⁸

For those not interested in the do-it-yourself approach, twelve companies in Spokane built shelters between 1960 and 1962. These firms built shelters, sold equipment for them and sold do-it-yourself kits. Survival Construction Inc. was founded in 1960. Others, including Atlas Fallout Shelters, opened their doors in 1961. The firms used reinforced concrete, cement block and steel to build basement units and buried backyard shelters. Residents of Spokane could visit some pre-fabricated shelters. The business of these companies dropped off by the summer of 1962 as it did elsewhere in the country.¹⁹

Concerns about nuclear war and public safety reached another peak during the fall of 1962. A *Spokane Chronicle* article reported that “Civil defense officials say the Cuban blockade, like the Berlin crisis before it, had brought a flood of citizen inquiries about fallout shelters, food rationing, evacuation and emergency planning.” Washington state officials noted that since the Berlin crisis, emphasis had shifted from home shelters to “public havens in large buildings.” Given its location, the state was taking the threats seriously. Washington state was the only one to issue food and gasoline rationing cards to

¹⁵ “Build It Yourself – Shelter Plans Available,” *Spokane Chronicle* 20 April 1960, p. 31; The Family Fallout Shelter, p. 19.

¹⁶ O’Connor, pp. 68-69.

¹⁷ 10 Nov 1961, 4.

¹⁸ O’Connor, p. 74; “CD Office Says Business is Brisk,” *Spokane Chronicle* 2 August 1961 p. 18; “First National Bank Says Yes to Fallout Shelter Financing,” *Spokane Chronicle* 10 Nov 1961, p. 7; The General Store advertisement *Spokane Chronicle* 10 Nov 1961, p. 9;

¹⁹ O’Connor, p. 75

75 percent of its citizens. The state had also conducted an extensive civil defense educational program. State officials noted that it is “impossible to tell how many private shelters were built before the boom fizzled.”²⁰

Lee O'Connor, the historian of Spokane's private and public shelters, reports that the city Civil Defense Department estimated that Spokaneites built approximately 300 private shelters in their backyards and basements by 1967.²¹ Connor notes that most owners of shelters did not advertise the fact, and only a few shelters are known. Table 1 presents the known shelters in Spokane that O'Connor refers to, plus the Dwinnell shelter.

Table 1. Private Fallout Shelters in Spokane.
 \Source: O'Connor, *Take Cover Spokane* and this report.

Address	Owner	Date
2213 East 29th Avenue	Chester Brown	1958
3408 Crestline; neighborhood shelter in basement	Mr. and Mrs. G. R. Johnson	1953
4227 N Cedar	Curtis C. Vandervert	1960
1128 E Longfellow	Wesley S. Waggoner	By 1960
105 N Gillis	Dewey Allsop	1961
Not disclosed	Philip W Amborn	1961
Not disclosed	Pia Hansen owner in 2005	n.d.
South hill, not disclosed	Shelter visited in 1992	n.d.
504 W 19 th Street	Leonard and Nota Dwinnell	1961

Family Bomb Shelters: Plenty of How-To Information

During the late 1950s and early 1960s, the U.S. Department of Defense and other entities provided information about the conditions to expect during a nuclear attack, and how to provide shelter for one's family.

One of the major topics in the brochures intended for the general public was fallout. This was the term used for the after-effects of bombs, and was a collective term for radioactive fallout and fallout radiation. The term *fallout* was used to describe shelters, rather than bomb, as the purpose of these shelters was explained to protect people from fallout after bombs had been used. The unstated premise was that fallout shelter users survived the initial attack and firestorm. The effects of radioactive fallout were left unexplored in a 1959 brochure about shelters, leaving it at “fallout can effect more people than blast and heat in a nuclear attack.”²²

The nature of fallout was explained as a wave, similar to light in *The Family Fallout Shelter* brochure of 1959. Radiation, or fallout, was described as spreading like light, mostly in a straight line. This was why it was important to have a right-angle turn into the

²⁰ “Shelter Stocking Will Start Soon,” *Spokane Chronicle* 1 February 1963 p. 3.

²¹ O'Connor, p. 24.

²² *The Family Fallout Shelter*, p. 18.

entrance to a bomb shelter. If the shelter was in a basement, a wall was to be built parallel to the entrance wall to block radiation's path to the door.²³

Protecting the entrance from direct radiation, ventilation, lighting, and getting radio reception were across-the-board concerns for the various shelter types. Communication via radio with the Civil Defense organization was vital, yet the depth of protective concrete or earth limited reception. The hand-cranked ventilator worked with intake and exhaust pipes to provide air to breath. Batteries and flashlight bulbs were recommended for low-level lighting that could last more than a week. Water, food and sanitation were also of concern.

The Family Fallout Shelter, like later brochures, presented Americans with options for shelters, ranging from simple and somewhat ad-hoc shelters in their basement, shelters constructed in their basements, and a few types of shelters in the yard: buried or partially buried. Families could choose an option that fit their financial situation and anxiety levels. Building shelters as do-it-yourself projects resonated with many property owners who liked to customize their houses. The shelter accessible from the basement, buried in the yard with only ventilation pipes penetrating the surface was the highest-cost option, but there were options on materials and the second means of egress. Hatches in the yard were probably more common than constructing a garage addition to conceal the hatch, as the Dwinnell's chose to do at 504 W. 19th Street.²⁴ The Dwinnell's shelter design is similar to a recommended plan for new construction outside of the house's basement (Fig. 18).

As *Family Shelter Designs* brochure noted, the shelter designs presented to the public were designed to keep costs to a minimum and so that they could be constructed as do-it-yourself projects. The goal was to make all Americans feel that a fallout shelter on their property was within their reach.²⁵

²³ *The Family Fallout Shelter*, p. 16.

²⁴ The designs in the *Family Fallout Shelter* brochure of 1959 are similar to those in the 1962 Department of Defense, Civil Defense department's *Family Shelter Designs* brochure.

²⁵ *Family Shelter Designs*, p. 1.

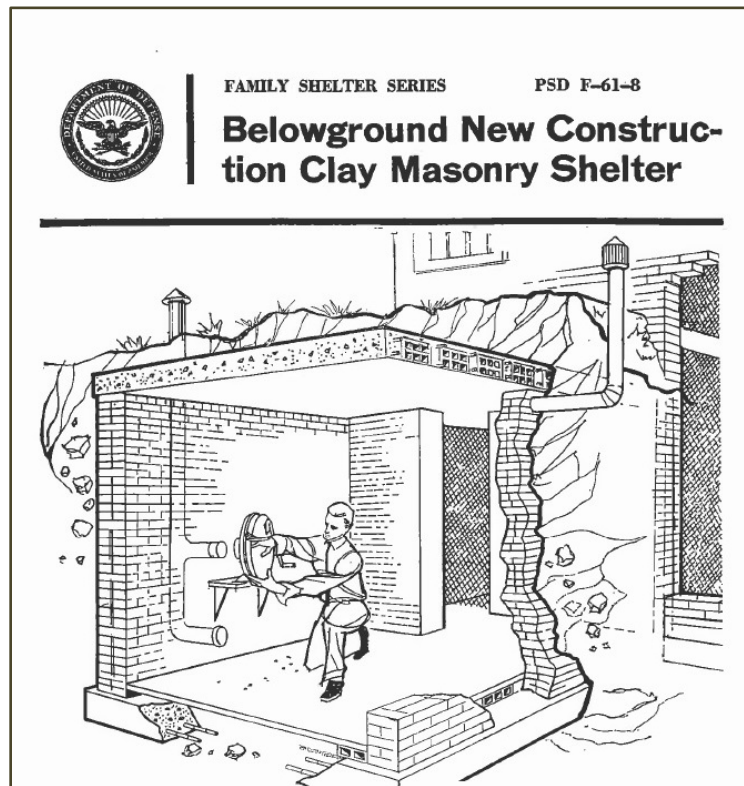


Fig. 18. Plan for a shelter similar to the Dwinnell's one from *Family Shelter Designs* (1962).

A House at 504 W. 19th Avenue

The Minimal Traditional style brick-clad house at 504 W. 19th Street is one of three houses known to have been built by custom home builder Henry G. Manser. Manser's obituary described him as a custom builder active between 1936 and 1946. His projects that were featured in local newspapers are the residence at 1605 S. Rockwood constructed for Mars Davis, which was featured in the *Spokesman Review* as distinctive among the new houses of 1939. Another is the residence he built in 1939 for contractor Fred Backlund at 3417 N. Wellington Place. Manser and the Backlund house were featured in an advertisement for WACO face brick that same year (Fig. 19). Manser states that houses built with brick are more desirable, and have a higher resale value. These three known houses of Manser's share only the use of brick, and he apparently built what others selected or designed.²⁶

²⁶ "Henry G. Manser (Obituary)," *Spokane Chronicle* 10 November 1970, p. 5; "WACO Face Brick" advertisement, *Spokesman Review* 20 August 1939, p. 33; "Among Fine Dwellings in Spokane," *Spokesman Review* 14 January 1940, p. 40; "Backlund's New Home Situated on View Location," *Spokane Chronicle* 25 November, 1939, p. 14;



Figure 19. WACO Face Brick advertisement featuring Henry G. Manser, builder, 1939.

In 1941, Manser applied for the building permit and built the house at 504 W. 19th Avenue with a distinctive clinker brick exterior. While the *Spokesman Review* noted in April 1941 that Henry R. Snow had purchased a lot on W. 19th and planned to build a house, the building permit lists Manser as both owner and builder that same year. It seems likely that as a custom builder, Manser was erecting the house to a design that Henry R. and Elsa Snow selected.²⁷

The house Henry G. Manser built for the Snows conveys the transitional nature of house design under the broad category of Minimal Traditional of the late-1930s and early 1940s, before World War II limited the construction of most residences. It has the one-and-one-half story height of many bungalows, but its steep hip roof and lack of a front porch sets it apart from bungalows. On the other hand, the clinker

brick of the exterior links it to a craftsman aesthetic and avoids references to the emerging Colonial Revival and cottage forms common in the 1940s under the umbrella of Minimal Traditional house design. The plainer interior finishing, without the wood trim and built-ins of bungalows also set it apart from earlier houses in Spokane that featured extensive interior woodwork.

Henry and Elsa Snow were approaching retirement age when they lived at 504. While there was a basement and space that could be finished under the hip roof, there were three bedrooms on the main floor and the Snows may have mainly used that floor. Henry was still owner and manager of a wholesale and retail auto parts businesses at age 59 in 1950; Elsa was two years older. They lived in the house for approximately ten years.²⁸

During the early 1950s, Charles E. and Florence McIntyre lived in the house. Florence Daggett had moved to Spokane during WW II and the couple married in 1947. While

²⁷ "Most Active in Two Years," *Spokesman Review* 13 April, 1941, p. 40; Spokane Building Permit (date illegible), lists Manser as owner and builder of the house at 504 W 19th Avenue. Aubrey Forsythe was identified the architect for the project that Maser built for Fred Backlund, "Backlund's New Home," but not for the Mars Davis project.

²⁸ Federal population census, 1950, Ancestry.com; *Spokane City Directory*, 1942-1949.

living at 504, Florence McIntyre was a civilian volunteer at the Filter Center where aircraft flight information was aggregated as part of Operation Skywatch.²⁹

Dr. Leonard and Nota Dwinnell married in Minnesota where Leonard grew up and attended St. Olaf College. Dr. Dwinnell served as a military doctor during World War II and then returned to Minnesota to practice. During the late 1940s and early 1950s, Dr. Dwinnell was a physician and surgeon in Fergus Falls, Minnesota and during 1952 had a fellowship at the Mayo Clinic, Rochester, MN.³⁰

The Dwinneells moved to Spokane in 1953 and Dr. Dwinnell opened an office as an orthopedic surgeon in the Paulsen building as an associate of Dr. George T. Wallace. The Dwinnell family lived briefly on E. 23th Avenue and then purchased 504 and lived there for many years. Their daughter Barbara completed her school years in Spokane and was married in 1966. Nota Dwinnell made a name for herself on the Spokane Country Club golf course. In 1961 she won the Chairman's Cup women's golf tournament at the Spokane Country Club. The Dwinneells are thought to have established an orchard on their property of various fruit trees. Dr. Dwinnell retired from his medical practice in 1979.³¹

The Dwinneells Construct a Fallout Shelter

In 1961 the Dwinneells decided to construct a bomb shelter on their property. They turned to National Construction Co. in Spokane, which advertised its bomb shelter building business in the *Spokane Chronicle* during September 1961 (Fig. 20). The National Construction Company, one of a handful of companies that built shelters, advertised that it had built the model shelter on the Vandervert property and did not require a down payment.³²

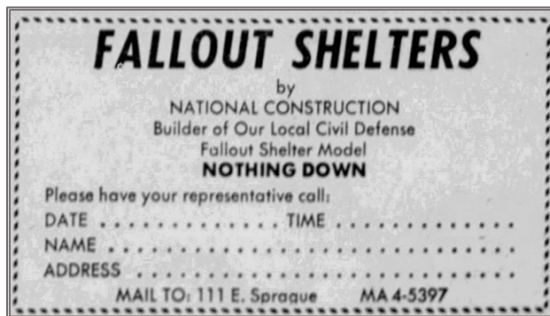
The building permit for the shelter of October 1961 (Fig. 21) states the cost as \$3,450. It was described as a "standard O.C.D. shelter S.O. 5" – referring to the Office of Civil Defense. At the same time, the Dwinneells doubled the size of their garage with an area described as "boat storage." This addition concealed the second exit point for the shelter through a hatch. With a cost of \$2,800 for the garage, the shelter and garage addition combined to be a major construction project.

²⁹ "Married Here," *Spokesman Review* 23 February, 1947, p. 46; *Spokane City Directory*, 1950, 1953; "Major Checks Filter Center," *Spokesman Chronicle* 28 September 1950, p. 11.

³⁰ "Dr. Leonard Dwinnell" obituary, *Spokesman Review* 12 March 1993, p. 50; "New Surgeon," *Spokesman Review* 4 October, 1953, p. 11.

³¹ Dr. Leonard Dwinnell" obituary; "New Surgeon." Nota Dwinnell's participation in golfing tournaments is well documented in the Spokane newspapers; "Mrs. Dwinnell Wins Chairman's," *Spokesman Review* 13 August 1961, p. 24.

³² Advertisement, *Spokane Chronicle* 4 September 1961, p. 9.



BUILDING DIVISION			
Number	W 504	Street	19th
Zone	R1	Date	10-11-61
Owner	L. A. Dwinnell	Permit No.	B 52389
Builder	National Construction	Address	W 504 -19th
Architect		Address	E 111 Sprague
Group	I	Type	V
Class of Work	Admn	Value	\$ 3,450.00
Frame		Fall-out Shelter	
Use	Single Family Residence	Standard O.C.D. Shelter	
		S.O.	5
Final O.K.		Inspector	

Figs. 20 and 21. Advertisement, *Spokane Chronicle* 4 September 1961, p. 9; 1961 Building Permit for "Fall-out Shelter."
Source: Pre 1993 Permit Archive; <https://my.spokanecity.org/permits/archive/>

Given the relative secrecy surrounding the construction of fallout shelters on residential properties, we can only assume that the shelter was built during the late fall of 1961; there was no announcement that it was completed. In later years, friends of owners of the property knew about the fallout shelter. The Dwinnell's daughter and granddaughter visited the house during the 2010s, and made sure to see the shelter.³³

³³ Sheryl and Thomas Piskel, conversation with the author, May, 2022.

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Spokane Building Permit B 52389, October 11, 1961, for a fallout shelter at 504 W 19th Avenue

Spokane Building Permit B 52390, October 11, 1961, for an addition to the garage at 504 W 19th Avenue

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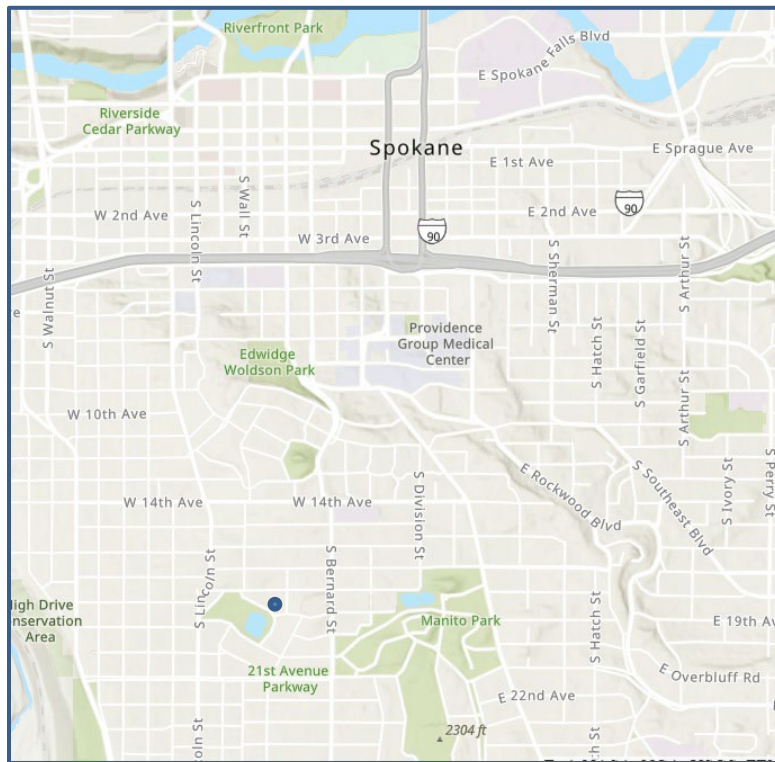


Fig. 10. Spokane County SCOUT map indicating 504 S. 19th Avenue. Source: <https://cp.spokanecounty.org/scout/map>



Figure 11. 1950 Sanborn Map, Vol 4, Sheet 602, with 504 W. 19th Avenue outlined.