

The MacDonald House
2424 Hauser Blvd -- Helena, Montana
by Carol Ann MacDonald Menchu ©



Joseph James (Mack) and Kathryn (Kay) L. MacDonald bought the entire 2400 block on Hauser Blvd, in the Kessler subdivision, in 1932. It was owned by William Gunderson and bounded by Hauser Blvd., Granite Street, Silverette Street and, at that time, an unnamed street, more like a driveway, that ran between Granite and Silverette giving side access to the Gunderson House at the dead-end of Granite Street. This is now Knight Street. The Gundersons also owned all the land between their house and Choteau Street (where Kessler Elementary School is). Mack and Kay bought the whole block because they didn't want any other houses between them and their view of Helena Valley.

Mack made his living as a Master Carpenter, but he was also an electrician, a plumber, and a roofer. In other words, he could do anything--he was a man for all seasons.

The only other houses in the vicinity were the Meyer house to the South and on the West side of Granite across Hauser; the Bean house on the West side of Granite Street; and the Gunderson house directly North.

By 1940, we were living in a one room tin shack that stood to the northwest of where the house was built.

On the map, the numbers show the only houses in the area when Mack started to build.

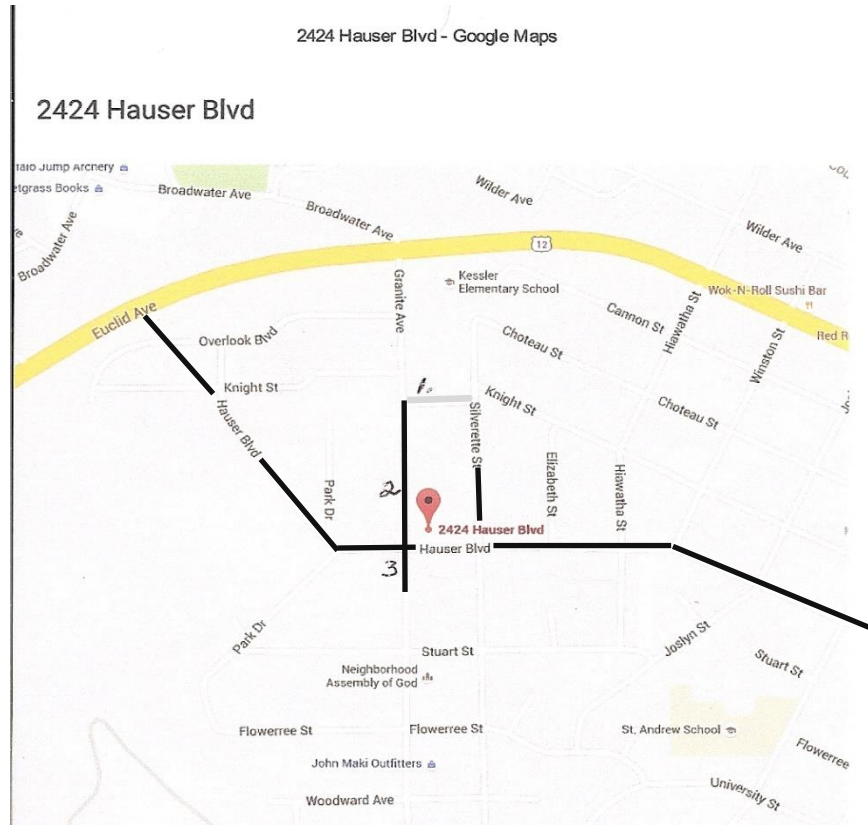
1 shows the location of the Gunderson House, a three story wooden structure fronting on the non-existent Granite Street. The Gundersons owned all the land from their home down to Choteau Street and across Silverette

Street to Elizabeth Street where there were to three story each wooden houses.

2 was the Bean House, a small red brick house, later sold to the Cummings.

#3 is the Charles Meyer House (still standing).

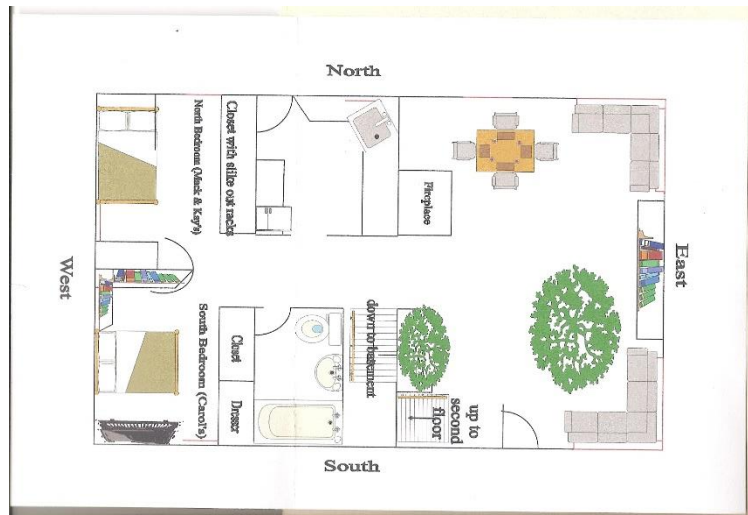
When the house was built, Hauser Blvd ran all the way down the mountain to Euclid Avenue (Highway 12).



Plans for the house

Mack drew up the house plans himself, incorporating, where he felt he could, ideas from Frank Lloyd Wright. These ideas included the Usonian house idea of small bedrooms (just used for sleeping!), a utilitarian kitchen, and a large living room area (certainly large for a small house in the late 1930s).

He planned for the extensive use of poured concrete with radiant heating in the floors, corner windows in the living room, the use of glass brick, and swing-out windows in the bedrooms (no longer there). He used built-ins throughout the house and



provided for recessed lighting in the bedrooms. He also planned the double fireplace (one in the basement and the one in the living room).

Mack did all the work on the house himself while holding down full-time jobs! The only outside help he had was when he put tar on the roof.

Building the House

He dug the basement and the septic tank with a pick, a shovel and, perhaps, a little dynamite to blast out the



bedrock. He hauled the dirt out in a wheelbarrow.

He built the frames for the concrete walls, mixed his own concrete in a portable cement mixer, and took it to the frames in that same wheelbarrow.

Looking South from Gunderson's you could see the tin shack that was Mack's workshop and we were living there by 1940. Basement poured and set and first floor framing begun. The house was framed by 1941 when Mack was drafted into the army.



Lumber, nails, and everything Mack needed for the building of the house was bought from the Helena Lumber Company on Main Street. Sand and gravel came from Helena Sand and Gravel, just down the mountain and across the highway.



Looking South from Gunderson's you can see the tin shack that was Mack's workshop and where we were living in 1941. Basement poured and set and first floor framing begun. The house was framed in by 1941 when Mack was drafted into the army.

The Basement

There is a lot of concrete used in the house. The walls and pillars of the basement, the fireplaces up and down, the floor in the living room and, of course, the septic tank.

It speaks well of the strength of the house, that the living room floor, which is over the expanse of the one-car garage, is solid and firm after over 80 years.

The layout of the basement with its large windows and the windows making up the upper half of the interior garage wall, was to allow outside lighting to come into the center hallway and to accommodate the possibility of alternate use when the house was finished. While the house was being constructed, the basement was Mack's workshop, packed with tools and wonderful, fragrant, sawdust.

The strength of the house is easily visible in the construction techniques that can be seen in the photos and the house itself. The floor base in both first and second floors is 1x8 boards put in on a diagonal. This created stability and strength to the house.



The strength of the house is obvious when looking at the basement ceiling. The 1x8s are on the diagonal out of the corners of all the upstairs rooms, including the second floor, resulting in a very solid, non-moving framework.

On the left is an example of his use of concrete.

On the right you can see the advantage of the windows in the inside garage wall; not only do they provide outside light, but also open a closed area.

The doorway to the outside is at the end of this hall, and as you can see, blocked off.

Transite

Grey *Transite* (a trade name for asbestos reinforced Portland cement, sold in pre-cast corrugated sheets and advertised as “fireproof” -- the building wonder of its time) was what Mack chose for siding on the house—it seemed a perfect choice at the time. He also built the base-work of the kitchen cabinets of the same material as well as choosing it to ‘tile’ the kitchen and bathroom floors. The kitchen floor had irregular shaped pieces each with its own pale rainbow color adding life to the room. Neither the kitchen nor the bathroom were finished beyond necessities before Mack died. See picture of the house above.

Radiant heat in the house

Mack chose radiant heating for the house because it seemed like a good idea and eliminated the need for ducts and a large furnace. The two water heaters for the house were on the landing of the basement stairs. One fed the radiant heating pipes, the other provided hot water for house use.

Copper pipe was snaked throughout the first floor, each connection carefully soldered and checked and rechecked and checked again and tested, retested, and tested again to be sure there was no leakage anywhere before the floors were laid and, eventually, the cement was poured in the living room.

Mack ran the heating pipes up the wall in the living room between the stairs to the second floor and the first floor hall doorway and built a planter for his tropical plants. This meant that corner was always 5 to 10 degrees warmer than the rest of the room. The planter and the pipes have since been taken out.

It was wonderful on a cold winter morning to hear the house talk as the warm water moved through the pipes and the wood expanded down the hallway and into the bedrooms. To be able to step down on a warm floor in the middle of winter was a treat!

This system was disconnected in the 1970s and is no longer usable. Pictures on page

Wood in the house

The wooden floor in the hallway and both downstairs bedrooms is oak salvaged from a roller rink that was being razed in the 1940s. The only other hardwood used in the house was for the spindles on the bookcase in the South bedroom.

Knotty pine was the wood of choice for all the paneling in the House. Each board was chosen for its grain, knots, and shading. Placement of each board was calculated and based on its markings (knots and coloring).

Windows

The bedroom and second story windows were built to be hinged and swing out, with screens on the inside. These were never finished. However, the windows were removable and were often opened in the summertime. These have been replaced.

The corner windows in the living room were ahead of their time when planned and the use of the glass block in the corners was Mack’s version of Frank Lloyd Wright’s disappearing window corners. These windows were not made to open.

The use of glass brick in the bathroom was to provide privacy without sacrificing light, eliminating the need for curtains.

Plaster

Mack used a rough finished plaster on the walls because he wanted them to have character. Whenever he was out in the mountains he looked for anything that would be interesting or useful and found a yellow sand which he used on all the raised areas in the bedrooms and a purple sand which he used as 2 inch decorative line above the wainscoting in the North bedroom. These have all been painted over and the original colors lost.

The Living Room/Dining Room

The East wall has matched knotty pine boards radiating out from the center point. These extend out onto the ceiling and around the corners because Mack felt paneled walls should not just “end” at the ceiling or at a corner. This wall was planned to have a bookcase on the center section, some of which remains today. The base was removed when the current heating system was installed. He began carvings of pelicans to be the end pieces of the shelves. One is still in residence, as of this writing. I have the other.

The curve of the window frames was made to follow the curve of a woman’s back.

The windows allow views of Mount Helena and of the Helena Valley. The living room floor is concrete.

The dining table sat under the small window in the North wall with easy access as the pass-through from the kitchen. When built, the pass-through was a counter with storage underneath which could be opened from either side, kitchen or dining area. This was changed when the kitchen was remodeled.



These views of the North wall show the window which “defined” the dining room as well as the northeast corner window. These views of the North wall show the window which You can also see how the paneling curved around the walls and onto the ceiling.

Mack and Kay had corner couches that sat under both sets of living room windows. The Giant Leafed Philodendron that Mack grew could fill one of these corners.



The East window is in the center of the wall and the paneling on either side of the window mirrors itself — knot for knot, shading for shading.

The front window in the living room has interesting feature in the widow skirt. Under the left window there is a knot which Mack cut around when shaping the skirt and under the right window, he cut the skirt around a knot in the paneling so it would not be lost.

To the right is the existing carving he did for the shelf ends of the bookcase.



Stairway to second floor

The door to the stairway to the second floor is also of glass to allow for the flow of light.



Where the railing is now, was a set of shelves as whimsical as those on the East wall of this room, with the planter in the “L” formed by the stairs and the wall to the right.



The Second Floor

The second floor was planned and framed for two bedrooms. There was a doorway in the middle of the East wall leading to the roof over the living room.

The doorway was lost when the upstairs was finished and a bathroom put in after the house was sold. The upper landing over the stairwell was added with a window in the cubby formed that allows access to the roof.

The Hallway

Leaving the living room, the basement door is on the left and directly opposite it was a niche for the



telephone so it could be reached from both the hallway and the kitchen, a built-in table and seat that could be raised and lowered as needed for someone who wanted to sit while.

Leaving the living room, the basement door is on the left and directly opposite it was a niche for the telephone so it could be reached from both the hallway and the kitchen, a built-in table and seat that could be raised and lowered as needed for someone who wanted to sit while on the phone or take notes.

The bathroom door is after the basement doorway and across from the kitchen door.

The frame beyond the kitchen door was originally for a mirror.

You can see how the bedroom doors seem like butterfly wings.

The Kitchen

The kitchen sink was built into the corner of the north wall and the pass through to the living room. The counter to the left was on a slant to allow for the draining or drying dishes. There were no cabinets above the sink area, however the lower cabinets in the corner by the door were unique.

To make wise use of the area, Mack built the cabinet on an 45 degree angle from the door to allow easy in and out to the back porch. To use the odd, triangular space between this corner and the sink wisely, Mack built four swiveling drawers. The top deep enough for silverware and other utensils and graduating deeper to the bottom which held pots and pans.

These drawers did not just “pull” out, they were cantilevered from a post set inside the base cabinet next to the door and swung out for access to their contents. These were dismantled when the kitchen was modernized, and the sink repositioned under the window.

The cabinets Mack started had a place for a stove top and for a built-in oven on the wall facing the living room. The counter between the sink and the stove area was a pass-through to the dining area with regular shelves underneath with both sides of the upper and lower cabinets built to be accessed from both sides of the counter.

The cabinets on the opposite wall left room for a refrigerator and workspace with the lower cabinet to have a pull-out small table for snacking in the kitchen.

North Bedroom

The North bedroom was the master bedroom. The closet is the length of the room with sliding doors and each of the clothing rods slid out to allow access to the clothing. These doors have been replaced with curtains as of this writing.

The bed is built in with two storage drawers underneath. The frame held a double bed sized spring and mattress which slid out to give access to the wall side of the bed. The headboard is built in with a slide out shoe rack. The chest of drawers is also built in. There is a cove on the upper wall of this room for recessed lighting.

The rods in the closet slide out for easy selection of items.

Notice the detail in the woodwork of the shelf and rods.

Fortunately when the second floor was completed by a subsequent owner, the closets were built to match those on the first floor, but do not have slide out rods.



The built-in headboard forms a shelf visible underneath the pillow. You can see the slide out shoe rack here.

You can see the curves in the paneling meeting the built-in chest of drawers.

Here you can see, on the right, a close up of the curved paneling going from the door frame to the chest of drawers.

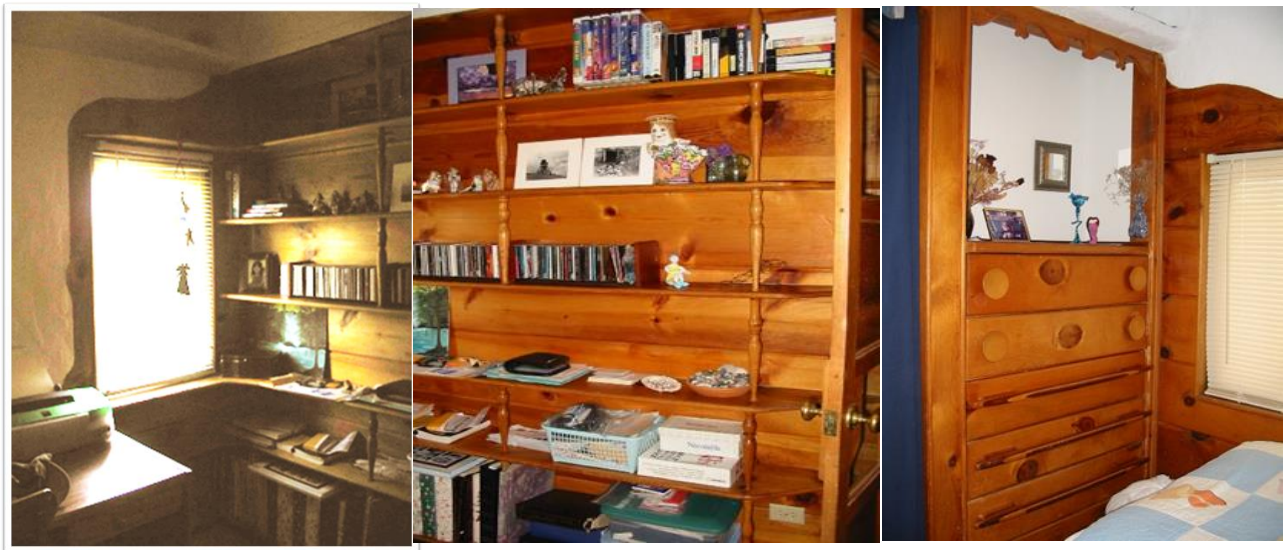


South Bedroom

The South bedroom was my room. The closet features are the same as the master bedroom and the chest of drawers is also built in. There is a cove in this room for recessed lighting.

Mack built a bookcase in this room. The door end of the bookcase is on an 45 degree angle to widen the entrance to the room, same as in the kitchen. As it turns the corner to the window, the window level shelf was deeper to act as a desk and the shelf under the desk was curved and narrower to accommodate knees. This was dismantled by one of the subsequent owners.

The doors to both bedrooms do not fill the frames top to bottom and are glassed. There were two reasons for this, one air circulation and second to allow the light from the windows opposite the doors to reach the hallway.



he Front Porch

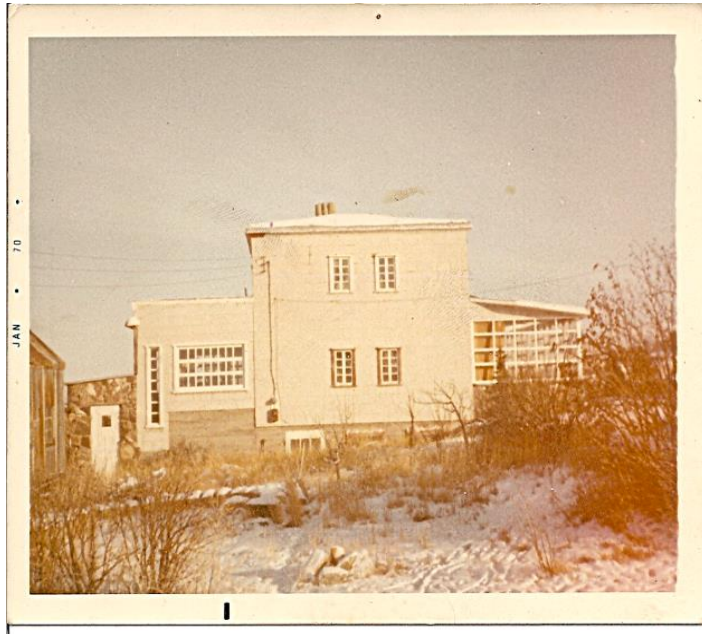


The front porch was added to shade the South side of the house and to also provide a place for Mack to harvest butterfly larvae when he had the opportunity to do so. He used translucent panels for the roof to provide diffused light during the winter. One subsequent owner started to put cedar shingles on the house but didn't continue them down the West side.

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The West and North sides of the house

This give a side view of the front porch added in the early 50s. The back porch was added and enclosed by 1956. Just barely, on the left, you can see the edge of the tin shack, then used for storage. The shack was taken down after his death. The long line of windows on the left of the porch let light into the back stairway.



He used an entirely different look of rock to build the West carport wall. The logs used to frame the car port were steamed and bent by him to provide the interior arch and one interesting tree trunk was used as a pillar for the car port.



In the foreground you can see the winter version of the Russian Olive hedge. The gap in the hedge was left so cars could come into the property from Granite Street.

The color of the house in 2004 was evidently chosen to carry through the colors of the rocks Mack chose for the carport walls.



The Northwest corner of the back of the house shows the rock wall and carport structure.

After the driveway was closed and the garage went into disuse, subsequent owners had no idea what this structure was actually for and used it for storage.

The lattice work in the porch windows was added on covering the large windows that formed the three outside walls. Someone added a small doorway and balcony just to the left (in this picture) of the original porch.

The Rock Walls

As with the sand for the plaster, every time Mack was out in the hills, he collected rocks to use for the two retaining walls. The front wall is there to provide a “separation” from the street level. The side walls and steps lead to the east side of the house which allowed the ground level to be low enough to allow the basement windows access to the light.

Each rock was loaded on to the back of the current pickup truck, hauled to the house, carried to its appropriate location, and put in place by Mack.

Mack made sure there were water pipes in the wall so there did not need to be long hoses dragged around.

Cement was, of course, used for the stairs in the East side wall. Pictures on page



Notice, in the top picture the bench built into the wall. You can see a bit of the large basement windows in the corner of the flower bed.



The Driveway

The driveway, on the East side of the house, went from Hauser Blvd down the side of the house and curved into the carport. It is no longer there.

The Russian Olive Hedge

Because Mack really liked the Russian Olive hedge that was planted at the Post Office, he planted a hedge down the West side of the yard, paralleling Granite Street. Rather than have a long hose to drag around, Mack planted each three bushes inside their own little “dam”. He then created the equivalent of a creek running down the hill for the water to run down for the hedge.

So, alternating directions, depending on where the previous day ended, top of hedge line or bottom, the water in the creek ran from the top down with small earthen dams moved to direct water into each small dam of three bushes.

That was my job.



An inspector checking over the house is said to have commented “If there’s an earthquake, this house will probably just slide down the mountain, it is so well built.”

A man checking the septic tank was surprised it was still in such good shape and working order considering it’s 60+ some odd years.

Mack was a very talented person who, for the most part, downplayed his abilities; he just did the things he loved to do, work with his hands and build his house, and collect butterflies.