

Plans are #22 residential map file Fee 25.00

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION
CITY OF MANITOU SPRINGS
COMMUNITY PLANNING AND DEVELOPMENT DEPARTMENT

received
07-02-85 km

606 Manitou Avenue, Manitou Spring, CO 80829 (Telephone: 684-5481)

PERMIT NUMBER _____ ISSUED ON _____

LOCATION OF PROPOSED CONSTRUCTION 40 SANDRA LANE ZONING RES

LEGAL DESCRIPTION _____

NAME OF OWNER/APPLICANT TOM BAUER DAYTIME TELEPHONE 634-4861

ADDRESS 833 N. TEJON CITY COLO SPRINGS STATE CO

CONTRACTOR'S NAME MARK ENNIS DAYTIME TELEPHONE 596-0198

ADDRESS 1220 DOYLE PL CITY COLO SPRINGS STATE CO

DESCRIPTION OF PROPOSED WORK

- New Building
- Residential
- _____ Non-residential (please describe) _____
- _____ Addition/Alteration (please describe) _____
- _____ Mobile Home Placement
- _____ On Single Lot
- _____ In Mobile Home Park
- _____ Subdivision of Land
- _____ Fill
- _____ Watercourse Alteration
- _____ Fill
- _____ Other (please describe) _____

ESTIMATED COST \$ 90,000

THE FOLLOWING INFORMATION MUST BE SUBMITTED WITH THIS APPLICATION:

1. Mean Sea Level (MSL) elevation of the lowest floor (including basement) of all proposed structures
2. MSL elevation to which any proposed structure will be floodproofed
3. Certification by a registered professional engineer or architect that the floodproofing method meets Manitou Springs floodproofing criteria
4. Plans of the development to be undertaken, including any filling and any watercourse or drainage way alteration

THE FOLLOWING INFORMATION MAY ALSO BE REQUIRED:

1. A description of the extent to which any watercourse will be altered or relocated
2. Base (100-year) flood elevation data for a development or subdivision greater than 50 lots or 5 acres

—OVER—

Floodplain & Enumeration FP
1. 85014
2. 40 SANDRA

THE FOLLOWING IS TO BE COMPLETED BY THE LOCAL ADMINISTRATOR:

The proposed development is located in the

Floodway deck ~~and~~ bridge columns

Floodfringe

Outside of the Special Flood Hazard Area *Main structure - (house)*

The Base Flood Elevation or depth number at the development site is 6425.6

The minimum required Base Flood Elevation or depth number is 6425.6

Source Documents: 1983 ~~MS~~ M.S. Flood Insurance

Study

Map Effective Date: 2-1-84

PLAN REVIEW

MLS elevation or depth number to which the structure is to be elevated or floodproofed is _____ feet NA

Are necessary information, certificates, and other permits attached?

Yes No

ACTION:

PERMIT IS APPROVED—The proposed development is in conformance with applicable floodplain standards *with the conditions below:*

PERMIT IS DENIED—The proposed development is NOT in conformance with applicable floodplain standards, as follows: _____

NO PERMIT IS NECESSARY

Signature, Local Administrator Paul Intemann

Date 7-2-85

ELEVATION CERTIFICATION

The certified as-built MSL elevation of the lowest floor is NA

The certified as-built MSL floodproofed elevation of the structure is NA

Certificates of a registered professional engineer or land surveyor documenting these elevations are attached.

Signature, Local Administrator _____

Date _____

Conditions:

Detailed drawings of deck columns and piers *submitted & approved*
Methods to prevent scouring around piers *be submitted and approved*

Stair risers and railing *open*
No storage of equipment or materials in the floodway

BADER RESIDENCE

COLUMN CAPACITIES IN FLOOD WATERS: 6x6 columns
FOR WATER FLOW @ 10.9 FT/SEC

$$F_x = \frac{62.4 (1' \times 4.533') \times 10.9 \times 10.9}{32.2}$$

$$F_x = 105.5 \text{ Pounds/Linear Ft.}$$

CHECK FOR 6x6 CALIFORNIA REDWOOD COL'S; #2 GRADE
4.77' max ht to 100 yr. FLOOD PLANE

$$M = \frac{105.5 (4.77^2)}{2}$$

$$M = 1200.2 \text{ FT. LB.}$$

$$S_x(\text{req'd}) = \frac{1200.2 (12)}{1200 (1.15)} = 10.43 \text{ IN}^3$$

$$6x6 S_x = 27.729 \text{ IN}^3$$

$$V = 105.5 (4.77) = 503.16$$

$$\text{req'd} = 80 \leq \frac{3 (503)}{2 (30.25)}$$

$$80 \leq 24.94 \text{ OK}$$



6x6 Red wd #2 col's embedded in 12" ϕ x 36" deep conc. piers

40 SANDRA LAKE

OMB 3067-0077



FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

This form is to be used for: 1) New/Emergency Program construction in Special Flood Hazard Areas; 2) Pre-FIRM construction after September 30, 1982; 3) Post-FIRM construction; and, 4) Other buildings rated as Post-FIRM rules.

TOM BADER
BUILDING OWNER'S NAME ADDRESS
LOT 25 CRYSTAL HILLS SUBDIVISION; 40 SANDRA LAKE
PROPERTY LOCATION (Lot and Block numbers and address if available) **MANITOU SPRINGS**

I certify that the information on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. code, Section 1001.

SECTION I ELIGIBILITY CERTIFICATION (Completed by Local Community Permit Official or a Registered Professional Engineer, Architect, or Surveyor)

COMMUNITY NO.	PANEL NO.	SUFFIX	DATE OF FIRM	FIRM ZONE	DATE OF CONSTR.	BASE FLOOD ELEV. (In AO Zone, use depth)	BUILDING IS
080063	0001B		Feb 1-84	A5	NEW	625.6	<input type="checkbox"/> New/Emergency <input type="checkbox"/> Pre-FIRM Reg. <input checked="" type="checkbox"/> Post-FIRM Reg.

YES NO It is intended that the building described above will be constructed in compliance with the community's flood plain ordinance. The certifier may rely on community records. The lowest floor (including basement) will be at an elevation of _____ ft. NGVD. Failure to construct the building at this elevation may place the building in violation of the community's flood plain management ordinance.

YES NO The building described above has been constructed in compliance with the community's flood plain management ordinance based on elevation data and visual inspection or other reasonable means.
If NO is checked, attach copy of variance issued by the community.

YES NO The mobile home located at the address described above has been tied down (anchored) in compliance with the community's flood plain management ordinance, or in compliance with the NFIP Specifications.

MOBILE HOME MAKE	MODEL	YR. OF MANUFACTURE	SERIAL NO.	DIMENSIONS X

(Community Permit Official or Registered Professional Engineer, Architect, or Surveyor)

NAME **DAVID A. LANKLEY** ADDRESS **S.R. 3360**
TITLE **ARCHITECT** CITY **WOODLAND PARK** STATE **CO** ZIP **80863**

SIGNATURE *David A. Lankley* DATE **6-17-85** PHONE **6073415**

SECTION II ELEVATION CERTIFICATION (Certified by a Local Community Permit Official or a Registered Professional Engineer, Architect, or Surveyor.)

APPLICABLE TO BRIDGE AND DECKS ONLY
FIRM ZONE A1-A30: I certify that the building at the property location described above has the lowest floor (including basement) at an elevation of **629.6** feet, NGVD (mean sea level) and the average grade at the building site is at an elevation of **629.5** feet, NGVD.

FIRM ZONES V, V1-V30: I certify that the building at the property location described above has the bottom of the lowest floor beam at an elevation of _____ feet, NGVD (mean sea level), and the average grade at the building site is at an elevation of _____ feet, NGVD.

FIRM ZONES A, A99, AO, AH, and EMERGENCY PROGRAM: I certify that the building at the property location described above has the lowest floor elevation of _____ feet, NGVD. The elevation of the highest adjacent grade next to the building is _____ feet, NGVD.

SECTION III FLOODPROOFING CERTIFICATION (Certification by a Registered Professional Engineer or Architect)

I certify to the best of my knowledge, information, and belief, that the building is designed so that the building is watertight, with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy that would be caused by the flood depths, pressures velocities, impact and uplift forces associated with the base flood.

YES NO In the event of flooding, will this degree of floodproofing be achieved with human intervention?
(Human intervention means that water will enter the building when floods up to the base flood level occur unless measures are taken prior to the flood to prevent entry of water (e.g., bolting metal shields over doors and windows).
YES NO Will the building be occupied as a residence?

If the answer to both questions is YES, the floodproofing cannot be credited for rating purposes and the actual lowest floor must be completed and certified instead. Complete both the elevation and floodproofing certificates.

FIRM ZONES A, A1-A30, V1-V30, AO and AH: Certified Floodproofed Elevation is _____ feet, (NGVD).

THIS CERTIFICATION IS FOR SECTION II BOTH SECTIONS II AND III (Check One)

CERTIFIER'S NAME **DAVID A. LANKLEY** COMPANY NAME **DAVID A. LANKLEY ARCHITECT** LICENSE NO. (or Affix Seal) **B-1422**

TITLE **ARCHITECT** ADDRESS **6-17-85 SR 3360 WOODLAND PARK CO 80863 6073415**

SIGNATURE *David A. Lankley* DATE CITY STATE PHONE