

548 CANNOSA

Thomas Kynard 3/3/81

DEPT. of BLDG. & SAFETY - CITY of LAS VEGAS, NEVADA		
OWNER: <u>J. G. KASTNER</u>	ADDRESS: <u>548 Canosa</u>	DATE: <u>4-15-57</u>
GEN. CONT. <u>OWNER</u>	TYPE OF STRUCTURE: <u>SWIMMING POOL & FENCE</u>	
PERMIT NO. <u>28619</u>	LEGAL DESCRIPTION: <u>Lot 3, Bl. 4, Beverly Green #3</u>	
LOCATION & FLOOR ELEVATION: <u>Heath 4-24-57</u>	PLUMBING CONT. <u>Butler 7-9-57</u>	TEMP. POLE CONT. <u>Butler 7-9-57</u>
FOOTINGS: <u>Heath 4-24-57</u>	PERMIT NO. _____ DATE _____	PERMIT NO. _____ DATE _____
FOUND. & PIERS: <u>Heath 4-24-57</u>	HEAT. & VENT. CONT. _____	INSPECTION _____ DATE _____
WALL STEEL: <u>Heath 4-24-57</u>	PERMIT NO. _____ DATE _____	ELECTRICAL CONT. _____
BOND BEAM STEEL _____	SEWER CONT. _____	PERMIT NO. _____ DATE _____
FRAMING & ROOF SHEATHING _____	PERMIT NO. _____ DATE _____	OUTLETS _____
STEEL FABRICATION _____	ROUGH SOIL _____	MOTORS _____ H.P. _____
CONNECTIONS & PAINTING _____	ROUGH WATER _____	SLAB _____
LATHING _____	SEWER OR SEPTIC TANK _____	ROUGH _____
PLASTER _____	TOP-OUT _____	FINAL ROUGH _____
SCRATCH _____	ROUGH GAS _____	FIXTURE CONT. _____
BROWN _____	ROUGH DUCT _____	PERMIT NO. _____ DATE _____
FINAL BLDG. <u>Heath 5/21/57</u>	FINAL PLUMBING <u>Butler 7-9-57</u>	FIXTURES _____
GRADING & DRAINAGE _____	FINAL HEATING _____	FINAL FIXTURE _____
ON-SITE PARKING _____ SPACES _____	FINAL GAS _____	APPROVED FOR METER _____
ENG. APPROVAL OF _____		
OFF-SITE IMPROVEMENTS _____		
APPROVED for OCCUPANCY: <u>Heath 4-29-57</u> INSPECTOR _____ DATE _____		
* PLEASE NOTE REMARKS ON REVERSE SIDE 548 Canosa - SWIMMING POOL & FENCE 4/15/57 23.04		

DEPT. of BLDG. & SAFETY - CITY of LAS VEGAS, NEVADA		
OWNER: <u>JERRY G. KASTNER</u>	ADDRESS: <u>548 Canosa</u>	DATE: <u>12-11-56</u>
GEN. CONT. <u>OWNER</u>	TYPE OF STRUCTURE: <u>DWELLING</u>	
PERMIT NO. <u>27727</u>	LEGAL DESCRIPTION: <u>Lot 3, Bl. 4, Beverly Green Tr. #3</u>	
LOCATION & FLOOR ELEVATION: <u>Heath 12-19-56</u>	PLUMBING CONT. <u>Butler</u>	TEMP. POLE CONT. <u>Flapjack</u>
FOOTINGS: <u>Heath 12-19-56</u>	PERMIT NO. <u>25767</u> DATE <u>12-28-56</u>	PERMIT NO. <u>2015309</u> DATE <u>1-2-57</u>
FOUND. & PIERS: <u>Heath 1-7-57</u>	HEAT. & VENT. CONT. _____	INSPECTION <u>Heath</u> DATE <u>1-4-57</u>
WALL STEEL _____	PERMIT NO. _____ DATE _____	ELECTRICAL CONT. <u>Flapjack</u>
BOND BEAM STEEL _____	SEWER CONT. <u>same</u>	PERMIT NO. <u>20289</u> DATE <u>2-7-57</u>
FRAMING & ROOF SHEATHING _____	PERMIT NO. _____ DATE _____	OUTLETS <u>67</u>
STEEL FABRICATION _____	ROUGH SOIL <u>Barley 1-2-57</u>	MOTORS _____ H.P. _____
CONNECTIONS & PAINTING _____	ROUGH WATER _____	SLAB _____
LATHING _____	SEWER OR SEPTIC TANK <u>Barley 1-24-57</u>	ROUGH <u>On rock 2-11-57</u>
PLASTER _____	TOP-OUT <u>Barley 1-24-57</u>	FINAL ROUGH _____
SCRATCH _____	ROUGH GAS _____	FIXTURE CONT. _____
BROWN _____	ROUGH DUCT _____	PERMIT NO. _____ DATE _____
FINAL BLDG. <u>Heath 5/21/57</u>	FINAL PLUMBING <u>Butler</u>	FIXTURES <u>77</u>
GRADING & DRAINAGE _____	FINAL HEATING <u>Barley</u>	FINAL FIXTURE _____
ON-SITE PARKING _____ SPACES _____	FINAL GAS <u>Barley</u>	APPROVED FOR METER <u>On rock 4-17-57</u>
ENG. APPROVAL OF _____		
OFF-SITE IMPROVEMENTS _____		
APPROVED for OCCUPANCY: _____ INSPECTOR _____ DATE _____		
* PLEASE NOTE REMARKS ON REVERSE SIDE 548 Canosa - DWELLING 12/11/56 23.04		

Therapsid 3/3/81

7-29-57 - New Inup - Health
Permit # 28619

7-29-57 New Inup - Health
Permit # 27727

Debbie Ingram 11-8-88

CITY OF LAS VEGAS, NEVADA

LOG NO. & AREA Attache DATE 11/2/88 CONST. VAL. \$ 2948

DEPARTMENT OF BUILDING AND SAFETY

BUILDING PERMIT - FOR: Single Family Dwelling, Remodel, Additions, Misc. Residential Construction

PHONE 386-6251

ADDRESS OF CONSTRUCTION 548 Canosa OWNER Margaret Rees PHONE NO.

LOT(s) 3 BLOCK 4 SUBDIVISION Beverly Green #3 ZONE R-1

PROPOSED CONSTRUCTION remove & replace concrete slab USE

THIS PERMIT FOR 7392 BLDG. ☐ A/C ☐ ELEC. ☐ PLBG. ☐ OTHER PERMITS REQD.: FENCE ☐ OFF SITE ☐ SWIM POOL ☐

FLOOR AREA BSMT 1ST 2ND GARAGE PORCH TOTAL 1474

CONTRACTOR Gilbert Conente STATE LICENSE NO. 21690 CITY LICENSE NO. 35855

ARCHITECT ENGINEER

MASTER PLUMBER/CONTRACTOR MASTER ELECTRICIAN/CONTRACTOR

OTHER INSPECTIONS AND FEES

- Inspections outside of normal business hours = \$30.00 per hour (minimum charge three hours).
- Re-inspection fee during normal business hours assessed under provisions of TABLE 3-A of the Uniform Building Code = \$30.00 per hour.
- Inspections during normal business hours for which no fee is specifically indicated = \$30.00 per hour (minimum charge one half hour).
- Additional plan review required by changes, additions or revisions to approved plans = \$30.00 per hour (minimum charge two hours).

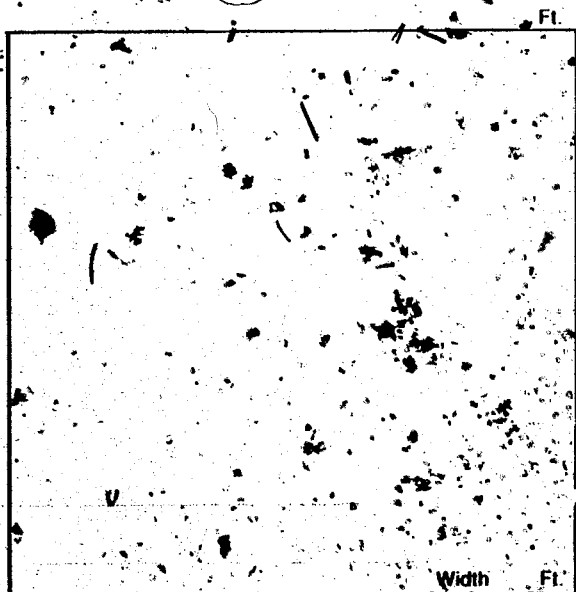
CONDITIONS OF THE PERMIT:

- I agree to call the City Building Department for inspections before concrete is poured, before rough wiring, electrical, plumbing, framing is covered. Also for air conditioning, drywall and sheathing inspection.
- I agree that when the job is completed that I will call for final inspection before occupancy.
- I agree to perform all construction in accordance with City Ordinance and Building Codes.
- The Contractor's signature below denotes authority from the owner to sign in his behalf and that the owner is aware of all requirements of this application and permit. Separate permits must be taken out for work outlined above this agreement.
- I have read and understand the contents of this application and permit. I hereby state that the information I have supplied on this application is true and correct.
- Approval for the work under this permit will be given only after refuse and debris have been removed from job site and public right of way.
- 24 HOUR MINIMUM NOTICE REQUIRED FOR INSPECTIONS.

BY: D. Rebecca Bette I HEREBY DECLARE THAT I AM THE LEGAL OWNER OF THE ABOVE PROPERTY. OWNER

BY: D. Rebecca Bette AGENT

I hereby certify that I have reviewed this application and the proposed plans and have found that the proposed development meets the requirements of the City of Las Vegas Flood Hazard Reduction Ordinance for the issuance of this Development Permit.



**FOR INSPECTIONS
CALL 799-2071**

LAND DEVELOPMENT AND FLOOD CONTROL ENGINEER

PLANNING DEPT

BUILDING DEPT

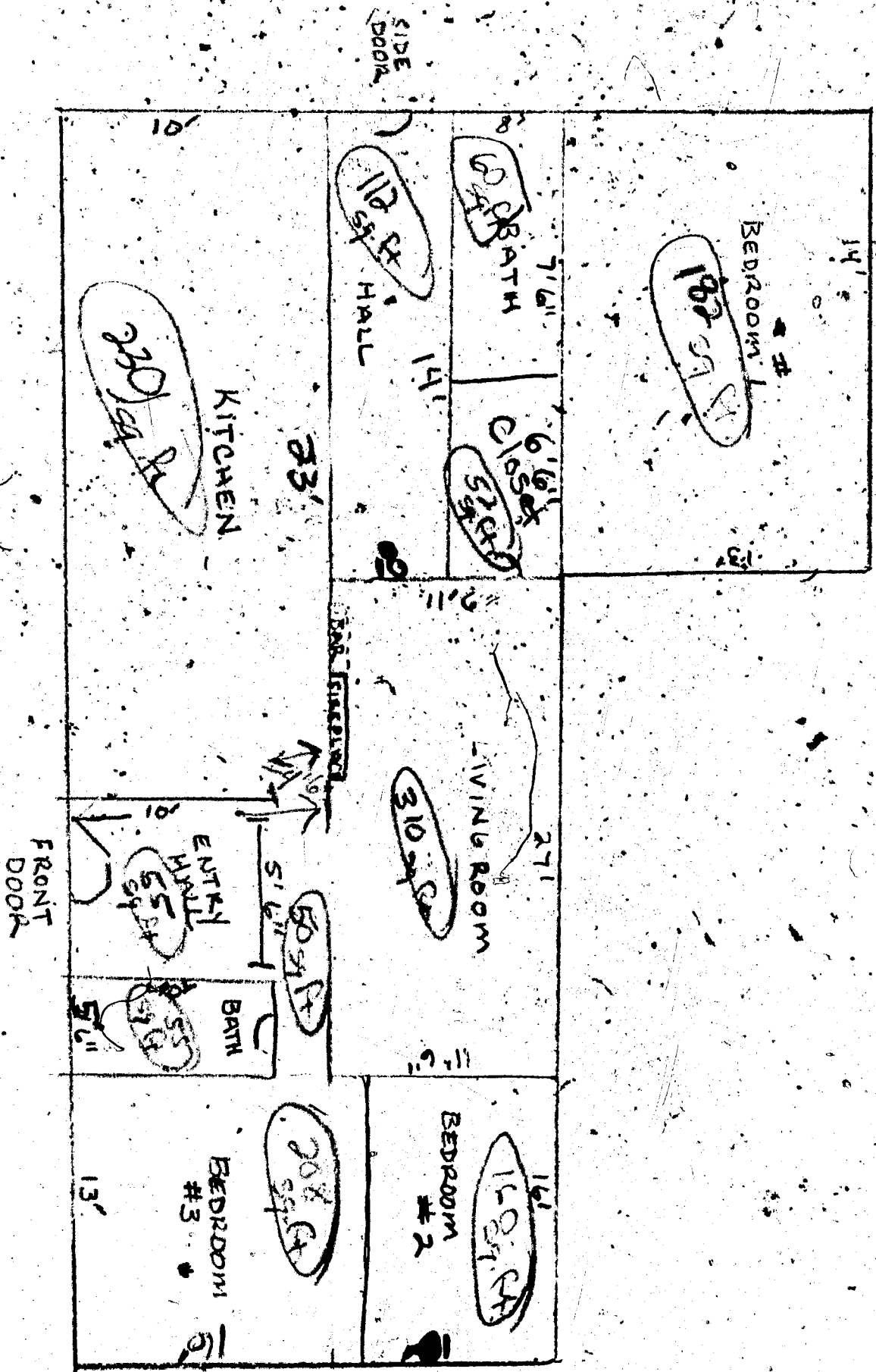
PLUMBING		FEE	ELECTRICAL		FEE
WATER DISTRIBUTION	6.00		RECEPTACLE SWITCH		.40
SEWER SYSTEM - NEW OR MODIFICATION	10.00		EACH LIGHT FIXTURE OR SOCKET		.30
FIXTURES - WATER SOFTENER, H.W. HEATER	2.00		SPECIAL OUTLET, APPLIANCE ETC.		.70
GARBAGE DISPOSAL - WASHER	2.00		SERVICE/PANEL - SUB/3.00 - 200A/6.00 - 400A/12.50		
FUEL PIPING	6.00		A.C. UNIT OR MOTORS		3.00
IRRIGATION SYSTEM	8.00		2310 - 2402 TOTAL		
MISC.			MISC.		
2310 - 2403 TOTAL			2310 - 2401 ISSUANCE FEE		
AIR CONDITIONING		FEE	7114 - 3654 SEWER CONNECTION		
NEW UNIT - 3 TON = 9.00 OVER = 16.50			2310 - 2401 PLAN REVIEW FEE		
FURNACE TO 100,000/9.00 OVER/11.00			2310 - 2401 BLDG. PERMIT FEE		
VAPORATIVE COOLER	16.50		TOTAL FEES		<u>46.20</u>
VENTILATION FAN	2.35				<u>46.20</u>
2310 - 2405 TOTAL					

Permit Expires 180 Days After Abandonment of Work

RECEIPT
***003**
SFD 46.20
CHEK 46.20
7392A000 14:56

PERMIT NO.
MUST BE MACHINE VALIDATED

Debbie Inghram, 1/18/88



1474 sq. ft.

attached



October 31, 1988

Ms. Margaret Rees
P.O. Box 70417
Las Vegas, Nevada 89170

Reference: Distress Observations
548 Canosa
Las Vegas, Nevada
Project No. 169401

Dear Ms. Rees:

This letter summarizes observations made of the distressed floor slabs at the single family residence located at 548 Canosa in Las Vegas, Nevada. Our services were requested and observations made on October 26, 1988.

Observations

We visited the residence on October 26, 1988 along with Ms. Rees, to observe the distress. All floor coverings had been removed, except in the kitchen and bathrooms, to reveal the concrete slabs. We observed cracking patterns in the slabs generally propagating from the corners of the rooms toward the center of the rooms in a diagonal pattern. Random cracks running both parallel to and perpendicular to walls were also observed. Vertical deflection across the cracks was observed to range from negligible to as much as one-quarter inch. The slabs appeared to have some vertical deflection upward toward the center of the rooms; however, this magnitude was not measured.

We also observed that all of the rooms in which the floor coverings had been removed had previously been patched with a fine aggregate concrete. The patches were generally located toward the center of the rooms where vertical deflection at one time was probably somewhat greater than currently observed. It appeared that the old concrete had been removed along cracks and the new concrete poured in a random pattern. It did not appear that the old concrete had been saw cut. We observed that the new concrete was also cracked in several places.

At the time of our initial observations, the floor slabs had not been removed to allow observation of the underlying soil or any deterioration to the underside of the slab. Furthermore, our observations did not reveal major distress

cracks in the walls or ceilings with exception of a small crack in the kitchen ceiling. Interior doors seemed to open and close without jamming.

We visited the house again on November 1, 1988 to observe an area about three feet square that had been removed from the living room area. We observed that the concrete was about four inches thick underlain by about 12 inches of sandy gravel (probably fill material) which was in turn underlain by a silty sand/sandy silt material. The soils were noted to be moist but not saturated.

We observed that the lower one to two inches of the concrete slab was deteriorated and could be easily crumbled by hand. This deterioration is typical of sulfate attack. We also observed that the more recent concrete poured had been poured on top of the deteriorated concrete, which is probably the reason the new concrete has cracked and displaced vertically.

Conclusions

Based on our observations and our experience with similar distresses in this part of the Las Vegas Valley, it is our opinion that the distress is caused by sulfate attack on the concrete floor slab. The sulfates, which occur naturally in the soil, attack the underside of the concrete slab. The resulting chemical reaction causes the concrete to deteriorate and swell, resulting in uplift pressures that eventually crack the slab. The pressures are generally not sufficient to cause uplift of walls which is the reason the center of the rooms experience more distress than the edges.

Although the soils underlying the slab were moist, the granular nature of these soils would suggest that swell pressures are negligible and not a contributing factor to the distress.

Recommendations

To remediate the floor slab distress, we recommend the existing slabs be removed to within about 4 to 6 inches of the walls by saw cutting along the walls. The underlying soil should then be removed to a depth of at least 12 to 18 inches and replaced with a compacted granular fill such as clean gravel, pea gravel, or Type II aggregate base. However, the existing soil should not be excavated below the bottom of existing foundations. The fill should be compacted to at least 90 percent of maximum dry density at

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about optimum moisture content as determined by test method ASTM D-1557. Prior to placing fill, the exposed natural soils, which may have been disturbed during excavation, should be compacted.

The granular fill should be overlain with a visqueen moisture barrier covered with two inches of sand if moisture sensitive floor coverings will be used. Otherwise, the moisture barrier is an optional consideration.

Once the existing soils are removed and replaced with appropriate fill, the concrete floor slabs may be poured. Any reinforcement placed in the slabs to resist cracking should be placed at mid-height in the slab. Slabs should be poured with a four-inch slump, or less, and should be cured according to the American Concrete Institute's (ACI) procedures to reduce the chance of cracking or curling. We recommend using Type V cement for concrete poured at this site.

We appreciate the opportunity to be of service. Please call if you should have any questions or need further information.

Sincerely,

KLEINFELDER

Larry M. Peterson

Larry M. Peterson, P.E.
Engineering Manager



OWNER	Margaret Rees	ADDRESS	548 Canosa
DATE	11-2-88	GEN. CONT.	Gilbert Concrete
BUILD. TYPE	remove & replace slab	PERMIT NO.	7392
LEGAL		LOG NO.	ATTACHED
BUILDING		MECHANICAL	
Pl. Loc. & Ft. ☐		Plumbing Cont.	
Location & Footing ☐		Permit No.	Date
Stemwall ☐		A/C Cont.	
Concrete Slab Floor ☐	gc 11/10/88	Permit No.	Date
Chimney Steel ☐		Sewer Fee	
Hearth Footing ☐		Irrig. Cont.	
Vert. Steel Reinf. ☐		Permit No.	Date
Horiz. Steel Reinf. ☐		Hood Cont.	
Roof Sheathing		Permit No.	Date
Insulation		Rough Soil ☐	
Framing		Rough Water ☐	
Ext. Lath		Top-Out	
Ext. Scratch		Rough Gas	
Ext. Brown		A/C Rough Duct	
Drywall		Final Plumbing	
Final Building	gc 11/10/88	Final Gas	
Appl. for Occu. Final Building		Final Air Cond.	
		Final Sewer	
ELECTRICAL		Rough Hood ☐	
Electrical Cont.		Final Hood ☐	
Permit No.	Date	Final Irrig.	
PT Rough			
Ground Electrode		ELECTRICAL	
Temporary Power		Temp. Pole Cont.	
Meter Tag		Permit No.	Date
Final Electrical		Inspection	Date