

RANGE 16 BOUNDARY SURVEY EAST, IN SECTION COL UMBIA 1, TOWNSHIP COUNTY, FLORIDA. Ŋ SOUTH,

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4\*X4\* CONCRETE MONUMENT FOUND 4\*X4\* CONCRETE MONUMENT SET IRON PIPE FOUND IRON PIN AND CAP SET POWER POLE

WATER METER

CENTERLINE

TELEPHONE BOX ELECTRIC LINES WIRE FENCE CHAIN LINK FENCE WOODEN FENCE

IEFIT OF A TITLE COMMITMENT OR A TITLE

## SURVEYING

830 VEST DUVAL STREET LAKE CITY, FLORIDA 32055 LAND SURVEYORS AND MAPPERS (386)752-7163 WORK ORDER # L-**15536** FAX (386)752-5573

1. THIS SAFETY VACUUM RELIEF SYSTEM IS A NON-MECHANICAL VENT SYSTEM THAT WILL LIMIT THE TRANSMISSION OF SUCTION AT THE OUTLET TO A MAXIMUM OF 4.5 INCHES OF MERCURY.

2. THIS SYSTEM IS A BACKUP TO PROVIDE SUCTION RELIEF SHOULD ENTRAPMENT OCCUR.

3. POOL AND SPA SUCTION INLETS SHALL BE PROVIDED WITH A COVER THAT COMPLIES WITH ANSI/ASME A112.19.8

4. ALL MANUFACTURED SUMPS SHALL COMPLY WITH ANSI/ASME A112.19.8. IF A FIELD-BUILT SUMP IS USED, ITS CONSTRUCTION SHALL COMPLY WITH THE MINIMUM DIMENSIONS SHOWN IN FIGURE 1. 5. THE VELOCITY ON THE SUCTION SIDE OF THE CIRCULATION SYSTEM SHALL NOT EXCEED SIX (6) FPS.

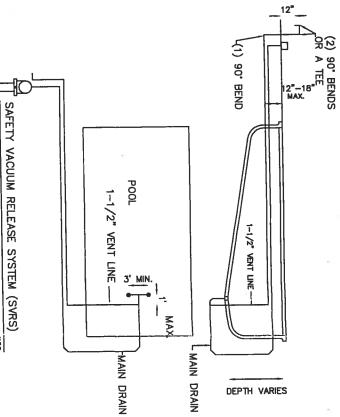
 $\mathbf{6}.$  CHECK VALVES CANNOT BE INSTALLED ON THE SUCTION SYSTEM. 7. THIS SYSTEM SHALL BE INSTALLED AND TESTED BY A QUALIFIED, LICENSED SWIMMING POOL PROFESSIONAL.

8. THE VENT LINE LENGTH MUST NOT EXCEED THE TOTAL LENGTH OF THE MAIN DRAIN LINE.

9. VENT OPENING MUST BE COVERED WITH WIRE MESH SCREEN TO PREVENT INSECTS, DEBRIS COLLECTION AND BACTERIA.

10. LABEL VENT: POOL SAFETY DEVICE- DO NOT HANDLE

pump: A minimum of two suction inlets shall be provided for each pump in the suction inlet system, separated by a minimum of 3 feet (914 mm) or located on two different planes; i.e., one on the bottom and one on the vertical wall, or one each on two separate vertical walls. These suction inlets shall be plumbed such that water is drawn through them simultaneously through a common line to the pump. PER FBC 424.2.6.6.4 (R4101.6.6.4) Suction inlets per



PIPE SIZES

AVERAGE FLOW GPM

VELOCITY FT. PER SEC.

SIZE

PIPE

MAXIMUM LENGTH FT.

CODE FOR RESIDENTIAL APPLICATIONS.

ENTRAPMENT AVOIDANCE VENT PIPE ANALYSIS-MAXIMUM LENGTH

COMPLIANT WITH

DUAL MAIN DRAIN ATMOSPHERIC VENT (SVRS)

SECTION 424.2.6.6 (R4101.6.6), FLORIDA BUILDING

APPROVED SWIMMING POOL &

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60

.74

17

1/2"

54 4 32

1/2"

75

2 1/2"

100

135

.37 .86 .29 .59

1/2"

73 79

1/2"

1/2"

95 177

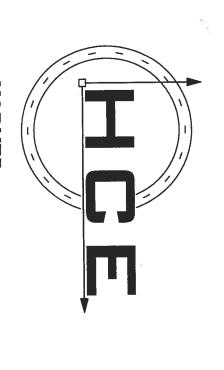
145 175 325

FIELD BUILT SUMPS Figure 1

Minimum Size (Typical)
D = Inside Diameter of Pipe

This analysis is based upon maintaining the length of pipe below the operating level of the pool, vertical and horizontal, to vacate within 3 seconds based on the size of the pump and the average flow rate. Due to the hydraulic gradient caused by the pump and piping, the vent line should be located as close to the tee at the dual main drain, as possible with a maximum distance of 12".

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CONSULTING ENG HORNER NEERS, INC.

JASON W. RICE, P.E. LICENSE # 58742 EXPIRES 2-28-2007 2005 DATE: 10-10-05 CHECKED DRAWN BY: PAGE HCE#n/a 유 BY: JWR JWR

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0-10-05 REVISE W/ NEW FBC CODE REFERENCES

REVISION

DATE

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