PROJECT Williams Pond
SUBJECT Legacy Buildings
ITEM

GAGNON ENGINEERING, INC.
Structural Consultants
10 SOLOMON DRIVE
GORHAM, MAINE 04038

DATE 12-14-13
BY RG CK
SHEET 1 OF 1
JOB No. 2059

Seismic Design Category

Re: IBC 2012 Chapter 16

$S_S = 0.18$ Fig 1613.3.1(1)

$S_1 \leq 0.065$ Fig 1613.3.1(2)

Site Class = D 16.13.3.2

$F_a \leq 1.6$ Table 1613.3.3(1)

$F_v \leq 2.4$ Table 1613.3.3(2)

$S_{MS} = F_a S_S = 0.29$ (16-37)

$S_{M1} = F_v S_1 = 0.16$ (16-38)

$S_{DS} = 2/3\ S_{MS} = 0.19$ (16-39)

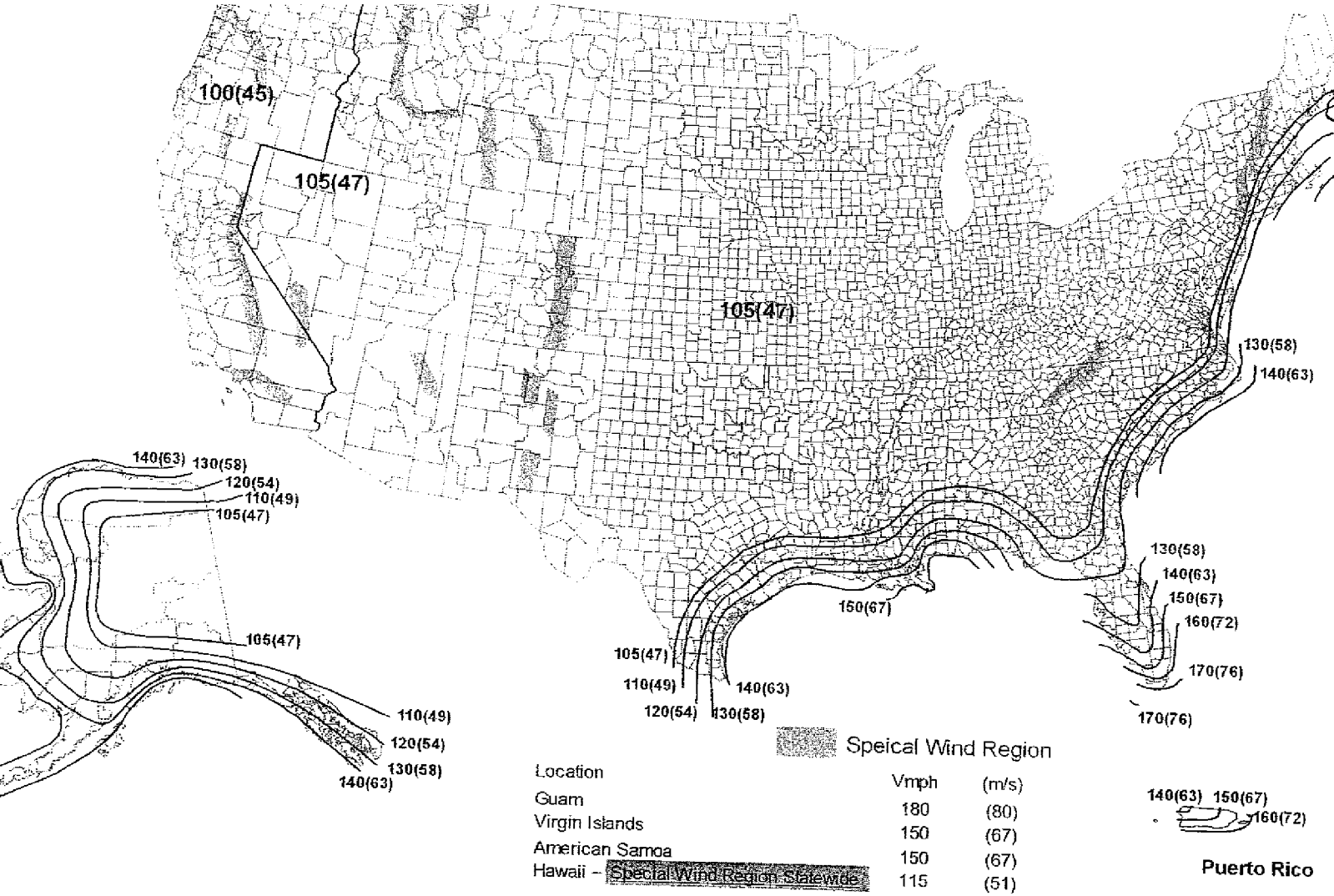
$S_{D1} = 2/3\ S_{M1} = 0.10$ (16-40)

Seismic Design Category (Risk Cat. I or II)

For $S_{DS} = 0.19$ => Category B (Tbl 1613.3.5(1)

For $S_{D1} = 0.10$ => Category B (Tbl 1613.3.5(2)

∴ Special Inspections not required per 1705.12



Risk
-Cat I

IBC

e nominal design 3-second gust wind speeds in miles per hour (m/s) at 33 ft (10m) above ground for Exposure C category.
erpolation between contours is permitted.
nd coastal areas outside the last contour shall use the last wind speed contour of the coastal area.
ous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.
eds correspond to approximately a 15% probability of exceedance in 50 years (Annual Exceedance Probability = 0.00333, MRI = 300 Years).

FIGURE 1609C
ULTIMATE DESIGN WIND SPEEDS, V_{ULT}, FOR RISK CATEGORY I BUILDINGS AND OTHER STRUCTURES