DESIGN STANDARDS FOR: ROOFING AND RE-ROOFING

PART 1 - GENERAL

1.01 Design of the roof shall include provisions for the fall restraints according to Safety Standards for Construction Work, Chapter 296-155 WAC, Part C-1: "Fall Restraint and Fall Arrest" (Division of Industrial Safety and Health - Dept. of Labor and Industries) - latest revision.

The Consultant shall coordinate the design of this restraint system(s) with appropriate personnel from Seattle Parks and Recreation (SPR).

1.02 Construction Details

A. For warranty purposes, all details shall be as recommended and/or approved by the roofing material manufacturer, such as for C.S.P.E. and/or E.P.D.M roofing.

B. All sheet metal construction details shall conform to the latest edition of the SMACNA unless noted otherwise.

1.03 Qualifications

A. Material Manufacturer - Specified roofing material or material system must have been in use for at least five (5) years, and the material manufacturer must have been in the manufacturing business of material for at least five (5) years.

B. Contractor - The Contractor shall be a firm experienced in installation of the specified roofing material/system for at least three (3) years, and capable of showing at least three (3) successful installations of roofing systems similar to the one specified for the project. A letter shall be provided at the time of award certifying that the Contractor is a qualified and approved installer by the roofing material manufacturer. At least 50% of the workmen on the job each day shall be qualified and experienced to install the specified roofing system.

1.04 On new or re-roofing projects, Contractor shall keep all roof drains covered (but functional in case of any water accumulation) at all times and maintain them during the construction to avoid plugging (clogging) of drains.

1.05 The following roofing systems are preferred:

A. Single Ply:

1. EPDM - Carlisle, Firestone
2. CSPE - J.P. Stevens, Burke

B. Asphalt Shingle (30 year minimum fiberglass composition):

1. Timberline by GAF
2 Architectural type

C. Sheet Metal Roofing:

1. IMSA Steel Building Products USA Inc.
2. Viewcrest (Corrugated Metal Roofing)- local supplier is Powers West Corporation.

D. Modified Bitumen: Siplast or Soprema

1.06 All three-tab or architectural roof shingles shall have step flashing at any slope cut against a wall, vent, ventilator, skylight, etc.

1.07 Provide zinc strips at all three tab roofs to control moss. Install these strips just below continuous ridge vent.

1.08 Provide continuous ridge and sofit venting as required.

1.09 All ridge and hips shall be hand tabbed on all 3 tab asphalt shingle roofs.

1.10 All metal roofing shall be standing seam type or approved. No surface fasteners exposed to weather shall be allowed for any standing seam roofing. All connections shall be welded connections only (snap, lock, clip type fastening are acceptable.)

1.11 Any time a penetration in a metal roof is wider than the distance between the standing seams, a cricket on the high side is required along with a metal flashing pan. Each side of the pan shall be raised to match the standing seam (see attached Figure 6-21 and 6-22 from SMACNA, and as modified by the Department of Parks and Recreation.)

1.12 All metal coping caps shall have standing seams as shown on the attached detail.

1.13 Gravel shall not be used on any roof.

1.14 Metal gravel stops shall not be used with torchdown systems.

1.15 Any square or rectangular penetration (8 square inches or more) through the roof shall have a raised curb high enough to accept a cricket on top (high) side to divert rain water.

1.16 Scuppers through the parapet shall be set one (1) inch lower than the finished roof at that point (in order to avoid standing water at the scupper). The through wall metal shall be stainless steel.

1.17 Where roof hatches are required and/or provided, they shall be easily accessible with a fixed ladder.

1.18 Provide clean-outs where downspouts are connected to sewer.

END OF SECTION