### MECHANICAL ENGINEER AND DESIGNER CANDIDATE QUESTIONNAIRE

# I. GENERAL:

These questions are to help evaluate a mechanical engineering candidate's strengths and weaknesses. Our firm is looking for enthusiastic and motivated individuals with good technical, organizational, and communication skills.

Lack of experience in any area(s) is not necessarily a negative but does provide insight on the overall capabilities of an individual and what type of design that individual is currently capable of performing.

### II. INDICATE FROM 1 to 5 YOUR ABILITY TO DESIGN THE FOLLOWING HVAC SYSTEMS: (1 is strongest and 5 is little or no experience)

- A. Packaged or split system DX:
- B. Variable refrigerant flow systems:
- C. Air cooled chilled water systems:
- D. Water cooled chilled water systems:
- E. Water source heat pump systems:
- F. Geothermal water source heat pump systems:
- G. Low pressure (<15 PSIG) steam systems:
- H. High pressure (>15 PSIG) steam systems:
- I. Hot water systems
- J. Systems with energy recovery wheels:
- K. Systems with heat pipes:
- L. Ice storage systems:
- M. Variable speed pumping systems:
- N. Variable flow chillers:
- O. Smoke control systems:
- P. Kitchen hood and UDS systems:
- Q. Stair pressurization systems:

#### III. PROJECT RESPONSIBILITIES:

(1 is a task you frequently handle and 5 is a task you rarely or never handle):

- A. Interview with client to procure project:
- B. Meet with client to discuss contracts:
- C. Meet with client to review systems, scope of work, etc.:
- D. Develop or modify firm's standard specifications:
- E. Develop or modify firm's standard details:
- F. Develop or modify firm's standard equipment schedules:
- G. Check shop drawings:
- H. Perform project inspections:
- I. Manage projects directly for the client (i.e., engineer prime):

## IV. LIST STRENGTH OR WEAKNESS:

(1 is a strength and 5 is little or no experience)

- A. Understanding codes:
- B. Thoroughness in specifications:
- C. Thoroughness in information on plans:
- D. Coordination with architect, client, and other consultants:
- E. Coordination and communication with contractors:
- F. Thoroughness in review of shop drawings:
- G. AutoCAD (speed and accuracy):
- H. REVIT (speed and accuracy):
- I. Thoroughness in investigating existing conditions:

## V. WHAT HAS BEEN YOUR ROLE ON LEED PROJECTS IF ANY:

(1 is lead role and 3 is little or no role)

- A. Evaluating project LEED points:
- B. Providing technical analysis:
- C. Submitting LEED documentation:

### VI. TYPES OF PROJECTS ON WHICH YOU HAVE WORKED:

(1 is often and 5 is few or none)

| A. | Schools (K-12):          | New: | Renovations: |
|----|--------------------------|------|--------------|
| B. | University and Colleges: | New: | Renovations: |
| C. | Libraries:               | New: | Renovations: |
| D. | Laboratories:            | New: | Renovations: |
| E. | Hospitals:               | New: | Renovations: |
| F. | Nursing Homes:           | New: | Renovations: |
| G. | Office Buildings:        | New: | Renovations: |
| H. | Detention Facilities:    | New: | Renovations: |
| I. | Retail:                  | New: | Renovations: |
| J. | Restaurant:              | New: | Renovations: |
| K. | Hotel:                   | New: | Renovations: |

## VII. NUMBER OF YEARS WORKED AT LAST FOUR (4) FIRMS:

- 1. Approximate Dates:
- 2. Approximate Dates:
- 3. Approximate Dates:
- 4. Approximate Dates:

## VIII. ARE YOU LOOKING PRIMARILY FOR A:

Design Role:

Design/Management Role:

Management Role: