

BASIS OF DESIGN – MULTIPLEX MOVIE THEATER PROJECT

Date: December 2015 Project Name: Multiplex Movie Theater Project Project #: 2015-01 Prepared By: Reader Revision date: _____

BUILDING

New Construction Renovation Addition Sq. Ft.: _____ No. of floors below grade: _____ No. of floors at and above grade: _____

UTILITIES

Electrical: New Upgrade Existing **Gas:** New Upgrade Existing **Steam:** New Upgrade Existing **Chilled Water:** New Upgrade Existing

Hot Water: New Upgrade Existing

Services from Utility of: Electric Gas District Energy Existing **Campus Power Plant:** Electric Gas Steam CHWS CWS Hot Water None

UTILITY DESIGN PARAMETERS

Electrical: 120/1/60 208/3/60 277/3/60 480/3/60 ___/3/60

Emergency Power: New Diesel oil Gas Existing None

Gas: Design Parameters by Plumbing Engineer

Steam Pressure: Low @ ___psig Medium @ ___psig High @ ___psig High @ ___psig None

Chilled Water Temperature: CHWS @ 42°F & CHWR @ 56°F None

Condenser Water Temperature: CWS @ 85°F & CWR @ 95°F None

Hot Water Temperature: HWS @ 160°F & HWR @ 120°F when 16°F OAT and 90°F HWR 70°F when OAT is 60°F Fixed HWS @ ___°F & HWR @ ___°F None

ASHRAE APPLICATION HANDBOOK

ASHRAE 2015 Handbook: [5] Other Chapters: [X] Yes [] No **ASHRAE 2012 Handbook:** Chapter [1] [2] [3]

OWNER MECHANICAL DESIGN PARAMETERS

Equipment Location: On floor being served In central equipment room(s) On roof In penthouse Away from building

Maintenance Outside Occupied Space: Yes No

Redundancy: For new central air-handlers N+? No

Equipment/System Expansion: Increase equipment size by ___% No

Indoor Air Quality at: MERV rating of [8] for pre-filters MERV rating of [13] for final filter

Additional Consultants Design Parameters: Acoustics Security Infection None

Specialty Room(s): For Basement Special Room None

DESIGN CRITERIA

Outdoor Dry Bulb & Wet Bulb: 16°F Heating season 97°F/74°F Cooling season

Public/Common Area & Theaters: Occupied period unoccupied period Warm-up & cool down Operate 24-7 year-round

Set Point: 70°F Heating Season & 74°F and not-to-exceed < 60%RH Cooling Season

Occupancy Schedule: 24-7-365 Occupied/unoccupied

Mechanical & Electrical Space and Back of the House Area: Occupied period Unoccupied period Warm-up & cool down 24-7 year-round

Set Point: 68°F Heating season & 78°F < 60% RH Cooling season

Occupancy Schedule: 24-7-365 Occupied/unoccupied

Building space pressure: [+] [-] [=] at 0.05" pressure

ENERGY & ENVIRONMENT CRITERIA

LEED Certification: Yes No Other certification (List the program)

Annual Operating Budget: Energy budget Organization structure _____

Refer To "The Facility Files" For Additional Operation & Maintenance Design Criteria

SPECIAL CONDITIONS & REQUIREMENTS

1. _____

2. _____